


STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING						FORM 3 AMENDED REPORT <input type="checkbox"/>				
APPLICATION FOR PERMIT TO DRILL						1. WELL NAME and NUMBER Adelman 5-9C4				
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT ALTAMONT				
4. TYPE OF WELL Oil Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME				
6. NAME OF OPERATOR EP ENERGY E&P COMPANY, L.P.						7. OPERATOR PHONE 713 997-5038				
8. ADDRESS OF OPERATOR 1001 Louisiana, Houston, TX, 77002						9. OPERATOR E-MAIL maria.gomez@epenergy.com				
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) Fee			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>				
13. NAME OF SURFACE OWNER (if box 12 = 'fee') Selma L. Adelman						14. SURFACE OWNER PHONE (if box 12 = 'fee') 310-275-1582				
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee') 9255 Doheny Rd. No. 1402, Los Angeles, CA 90069						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')				
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input checked="" type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/>				
20. LOCATION OF WELL		FOOTAGES		QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN		
LOCATION AT SURFACE		1900 FNL 900 FEL		SENE	9	3.0 S	4.0 W	U		
Top of Uppermost Producing Zone		1900 FNL 900 FEL		SENE	9	3.0 S	4.0 W	U		
At Total Depth		1900 FNL 900 FEL		SENE	9	3.0 S	4.0 W	U		
21. COUNTY DUCHESNE			22. DISTANCE TO NEAREST LEASE LINE (Feet) 900			23. NUMBER OF ACRES IN DRILLING UNIT 640				
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 2000			26. PROPOSED DEPTH MD: 12600 TVD: 12600				
27. ELEVATION - GROUND LEVEL 6016			28. BOND NUMBER 400JU0708			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE Ballard City/Roosevelt City				
Hole, Casing, and Cement Information										
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
Cond	20	13.375	0 - 600	54.5	J-55 ST&C	8.8	Class G	1292	1.15	15.8
Surf	12.25	9.625	0 - 2500	40.0	N-80 LT&C	9.5	Unknown	312	3.16	11.0
							Unknown	191	1.33	14.3
I1	8.75	7	0 - 9400	29.0	HCP-110 LT&C	10.6	Unknown	457	2.31	12.0
							Unknown	91	1.91	12.5
L1	6.125	5	9200 - 12600	18.0	P-110 ST-L	13.7	Unknown	201	1.47	14.2
ATTACHMENTS										
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES										
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER					<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN					
<input checked="" type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)					<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER					
<input type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)					<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP					
NAME Maria S. Gomez				TITLE Principal Regulatory Analyst				PHONE 713 997-5038		
SIGNATURE				DATE 08/21/2013				EMAIL maria.gomez@epenergy.com		
API NUMBER ASSIGNED 43013523970000				APPROVAL  Permit Manager						

**Adelman 5-9C4
Sec. 9, T3S, R4W
DUCHESNE COUNTY, UT**

EP ENERGY E&P COMPANY, L.P.

DRILLING PROGRAM

1. Estimated Tops of Important Geologic Markers

<u>Formation</u>	<u>Depth</u>
Green River (GRRV)	4,433' TVD
Green River (GRTN1)	5,333' TVD
Mahogany Bench	6,233' TVD
L. Green River	7,433' TVD
Wasatch	9,433' TVD
T.D. (Permit)	12,600' TVD

2. Estimated Depths of Anticipated Water, Oil, Gas or Mineral Formations:

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River (GRRV)	4,433' MD / TVD
	Green River (GRTN1)	5,333' MD / TVD
	Mahogany Bench	6,233' MD / TVD
Oil	L. Green River	7,433' MD / TVD
Oil	Wasatch	9,433' MD / TVD

3. Pressure Control Equipment: (Schematic Attached)

A 4.5" by 20.0" rotating head on structural pipe from surface to 600' MD/TVD. A 4.5" by 13-3/8" Smith Rotating Head from 600' MD/TVD to 2,500' MD/TVD on Conductor. A 5M BOP stack, 5M kill lines and choke manifold used from 2,500' MD/TVD to 9,400' MD/TVD. A 10M BOE w/ rotating head, 5M annular, blind rams & mud cross from 9,400' MD/TVD to TD (12,600' MD/TVD).

The BOPE and related equipment will meet the requirements of the 5M and 10M system.

OPERATORS MINIMUM SPECIFICATIONS FOR BOPE:

The surface casing will be equipped with a flanged casing head of 5M psi working pressure. An 11" 5M x 11" 10M spool, 11" x 10M psi BOP and 5M psi annular will be nipped up on the surface casing and tested to 250 psi low test / 3,000 psi high test for 10 minutes each prior to drilling out. The surface casing will be tested to 1,000 psi. for 30 mins. Intermediate casing will be tested to the greater of 1,500 psi or 0.22 psi/ft. The choke manifold equipment, upper Kelly

cock and floor safety valves will be tested to 5M psi. The annular preventer will be tested to 250 psi low test / 4,000 psi high test. The 10M BOP will be installed with 3-½" pipe rams, blind rams, mud cross and rotating head from intermediate shoe to TD. The BOPE will be hydraulically operated.

In addition, the BOP equipment will be tested after running intermediate casing, after any repairs to the equipment and at least once every 30 days. Pipe and blind rams will be activated on each trip, annular preventer will be activated weekly and weekly BOP drills will be held with each crew.

Statement on Accumulator System and Location of Hydraulic Controls:

Precision Rig # 404 is expected to be used to drill the proposed well. Operations will commence after approval of this application. Manual and/or hydraulic controls will be in compliance with 5M and 10M psi systems.

Auxiliary Equipment:

- A) Pason Gas Monitoring 600' - TD
- B) Mud logger with gas monitor – 2,500' to TD (12,600' MD/TVD)
- C) Choke manifold with one manual and one hydraulic operated choke
- D) Full opening floor valve with drill pipe thread
- E) Upper and lower Kelly cock
- F) Shaker, de-sander and centrifuge

4. Proposed Casing & Cementing Program:

Please refer to the attached Wellbore Diagram.

All casing will meet or exceed the following design safety factors:

- Burst = 1.00
- Collapse = 1.125
- Tension = 1.2 (including 100k# overpull)

Cement design calculations for intermediate and production hole will be based on minimum 10% excess over gauge hole volumes. Actual volumes pumped will be a minimum of 10% excess over caliper volume to designed tops of cement for any section logged. A minimum of 50% excess over gauge volume will be pumped on surface casing.

5. Drilling Fluids Program:

Proposed Mud Program:

Interval	Type	Mud Weight
Surface	WBM	8.8 – 9.5
Intermediate	WBM	9.5 – 10.6
Production	WBM	10.6 – 13.7

Anticipated mud weights are based on actual offset well bottom-hole pressure data. Mud weights utilized may be somewhat higher to allow for trip margin and to provide hole stability for running logs and casing.

Visual mud monitoring equipment will be utilized.

6. **Evaluation Program:**

Logs:

Mud Log: 2,500' MD/TVD – TD (12,600' MD/TVD)

Open Hole Logs: Gamma Ray, Neutron-Density, Resistivity, Sonic, from surface casing shoe to TD.

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 12,600' TVD equals approximately 8,976 psi. This is calculated based on a 0.7124 psi/ft gradient (13.7 ppg mud density at TD).

Maximum anticipated surface pressure equals approximately 6,204 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/ft).

Maximum anticipated surface pressure based on frac gradient at 7" casing shoe is 0.8 psi/ft at 9,400' TVD = 7,520 psi

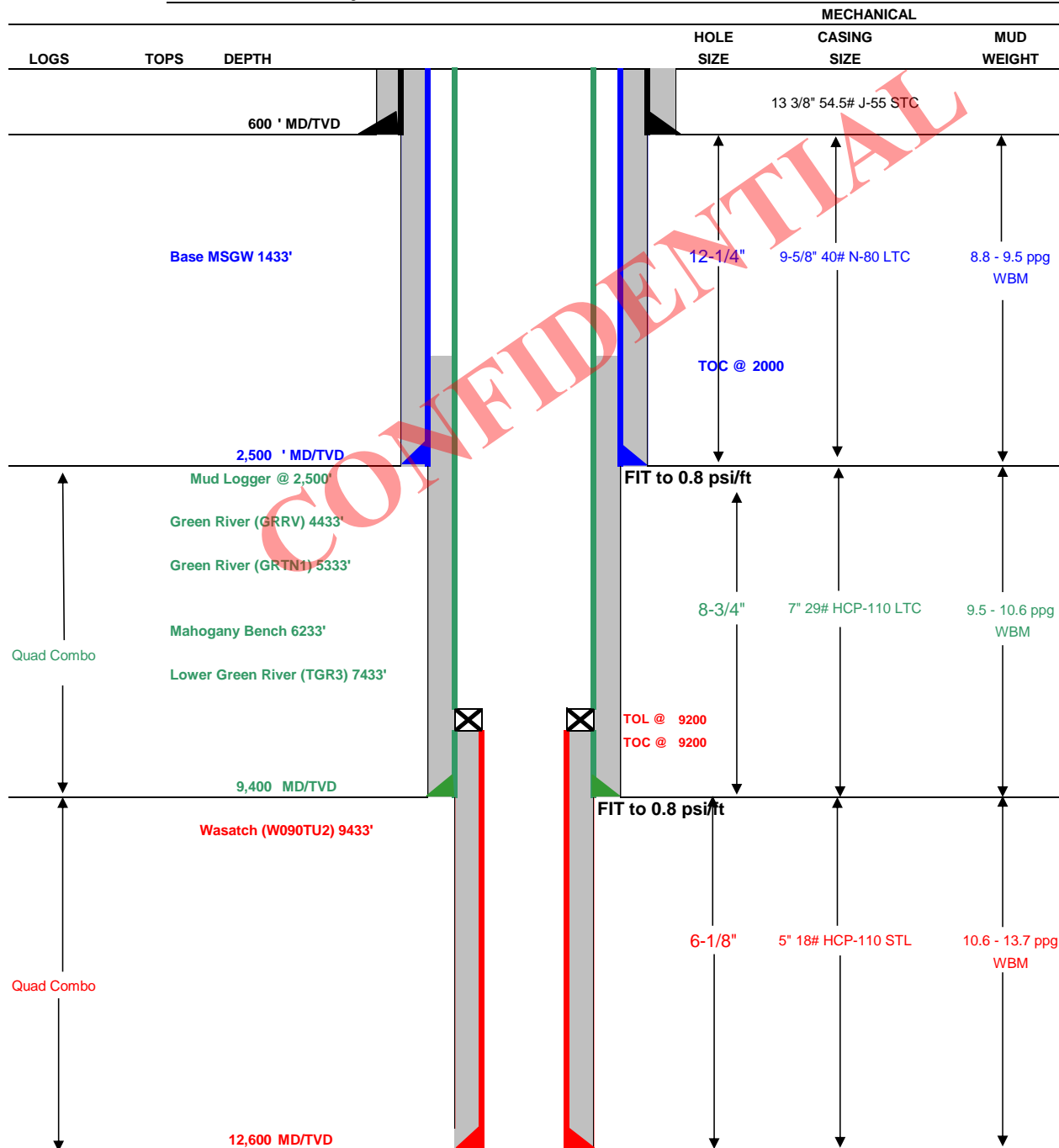
BOPE and casing design will be based on the lesser of the two MASPs which is 6,204 psi.

8. **OPERATOR REQUESTS THAT THE PROPOSED WELL BE PLACED ON CONFIDENTIAL STATUS.**



Drilling Schematic

Company Name: EP ENERGY	Date: August 16, 2013
Well Name: Adelman 5-9C4	TD: 12,600
Field, County, State: Altamont, Duchesne, Utah	AFE #: TBD
Surface Location: Sec 9 T3S R4W 1900' FNL 900' FEL	BHL: Straight Hole
Objective Zone(s): Green River, Wasatch	Elevation: 6015.9
Rig: Precision 404	Spud (est.): TBD
BOPE Info: 4.5 x 13 3/8 rotating head from 600' to 2,500' 11 5M BOP stack and 5M kill lines and choke manifold used from 2,500' to 9,400' 11 10M BOE w/rotating head, 5M annular, 3.5 rams, blind rams & mud cross from 9,400' to TD	



DRILLING PROGRAM

CASING PROGRAM	SIZE	INTERVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	13 3/8"	0	600	54.5	J-55	STC	2,740	1,130	514
SURFACE	9-5/8"	0	2500	40.00	N-80	LTC	5,750	3,090	737
INTERMEDIATE	7"	0	9400	29.00	HCP-110	LTC	11,220	9,750	797
PRODUCTION LINER	5'	9200	12600	18.00	HCP-110	STL	13,950	14,360	495

CEMENT PROGRAM		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
CONDUCTOR		600	Class G + 3% CACL2	1292	100%	15.8 ppg	1.15
SURFACE	Lead	2,000	EXTENDACEM (TM) SYSTEM: 5 lbm/sk Silicalite Compacted + 0.25 lbm/sk Kwik Seal + 0.125 lbm/sk Poly-E-Flake + 2% Bentonite	312	75%	11.0 ppg	3.16
	Tail	500	HALCEM (TM) SYSTEM: 3 lbm/sk Silicalite Compacted + 1% Salt + 0.3% Econolite + 0.25 lbm/sk Poly-E-Flake + 0.25 lbm/sk Kwik Seal + 0.5% HR-5	191	50%	14.3 ppg	1.33
INTERMEDIATE	Lead	6,400	EXTENDACEM (TM) SYSTEM: 4% Bentonite + 0.4% Econolite + 0.2% Halad(R)-322 + 3 lbm/sk Silicalite Compacted + 1.2% HR-5 + 0.125 lbm/sk Poly-E-Flake	457	10%	12.0 ppg	2.31
	Tail	1,000	EXPANDACEM (TM) SYSTEM: 0.2% Econolite + 0.3% Versaset + 0.9% HR-5 + 0.3% Super CBL + 0.2% Halad(R)-322 + 0.125 lbm/sk Poly-E-Flake	91	10%	12.5 ppg	1.91
PRODUCTION LINER		3,400	EXTENDACEM (TM) SYSTEM: 0.3% Super CBL + 0.1% SA-1015 + 0.3% Halad(R)-413 + 0.5% SCR-100 + 0.125 lbm/sk Poly-E-Flake + 3 lbm/sk Silicalite Compacted + 20% SSA-1	201	25%	14.20	1.47

FLOAT EQUIPMENT & CENTRALIZERS	
CONDUCTOR	PDC drillable guide shoe, 1 joint, PDC drillable float collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing.
SURFACE	PDC drillable guide shoe, 1 joint casing, PDC drillable float collar & Stage collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing & every 3rd joint thereafter.
INTERMEDIATE	PDC drillable 10M,P-110 float shoe, 1 joint, PDC drillable 10M, P-110 float collar. Thread lock all float equipment. Maker joint at 7,400'.
LINER	Float shoe, 1 joint, float collar. Thread lock all FE. Maker joints every 1000'.

PROJECT ENGINEER(S): Brad MacAfee 713-997-6383

MANAGER: Tommy Gaydos

EP ENERGY E&P COMPANY, L.P.
ADELMAN 5-9C4
SECTION 9, T3S, R4W, U.S.B.&M.

PROCEED NORTH ON STATE ROAD 87 FROM THE INTERSECTION OF STATE ROAD 87 WITH US HIGHWAY 40 IN DUCHESNE, UTAH APPROXIMATELY 4.55 MILES TO AN INTERSECTION;

TURN RIGHT AND TRAVEL EASTERLY ON A COUNTY B ROAD 2.85 MILES TO THE BEGINNING OF THE ACCESS ROAD;

CONTINUE EASTERLY THEN NORTHERLY THEN WESTERLY FOLLOWING THE ROAD FLAGS 0.89 MILES TO THE PROPOSED LOCATION;

TOTAL DISTANCE FROM DUCHESNE, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 8.29 MILES.

CONFIDENTIAL

EP ENERGY E&P COMPANY, L.P.

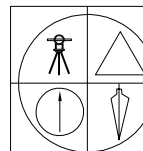
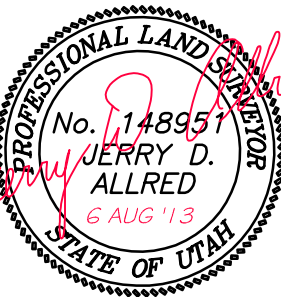
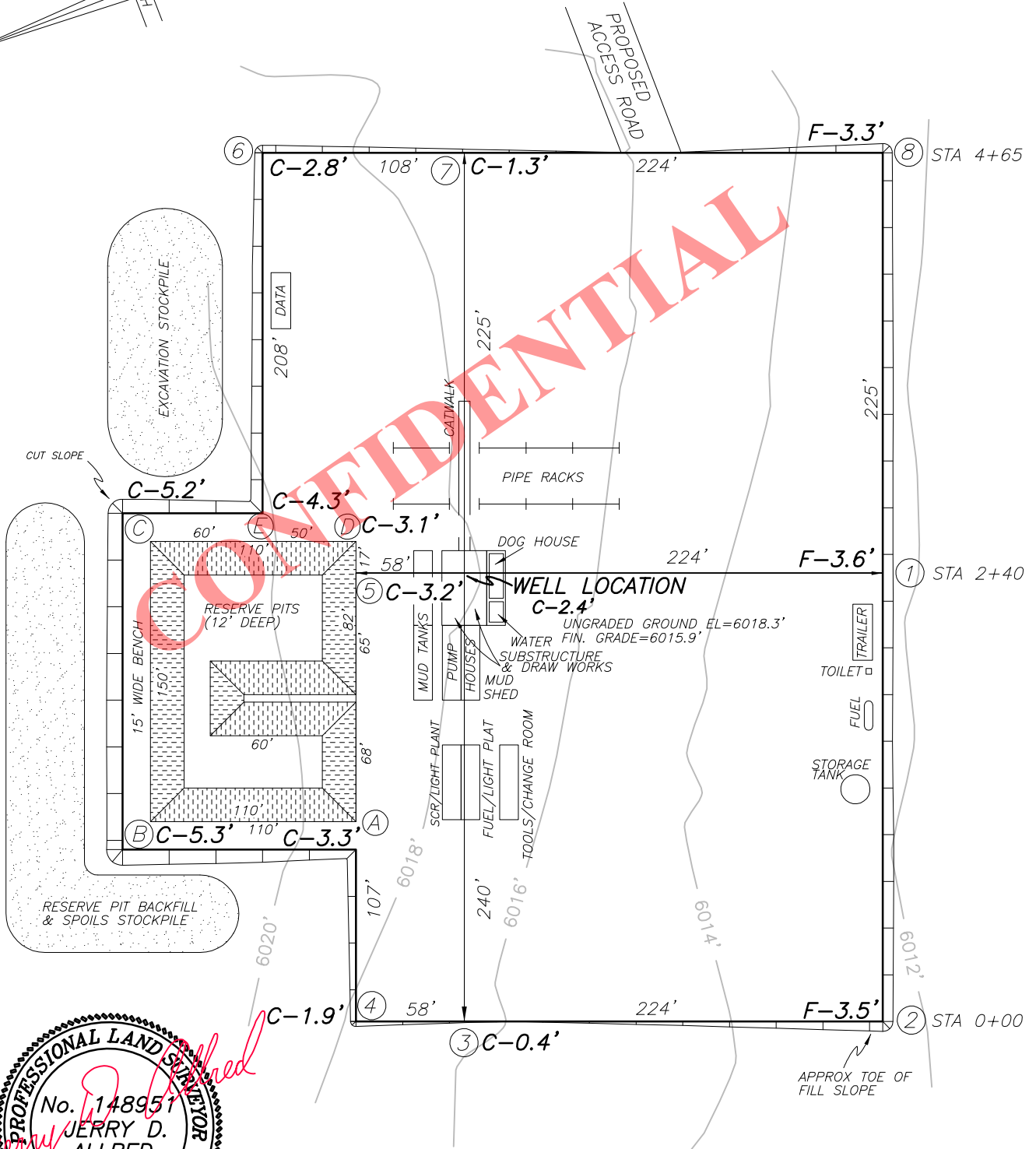
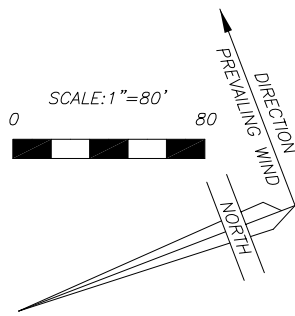
LOCATION LAYOUT FOR

ADELMAN 5-9C4

SECTION 9, T3S, R4W, U.S.B.&M.

1900' FNL, 900' FEL

FIGURE #1

**JERRY D. ALLRED & ASSOCIATES**
SURVEYING CONSULTANTS1235 NORTH 700 EAST--P.O. BOX 975
DUCHESTER, UTAH 84021
(435) 738-5352

6 AUG 2013

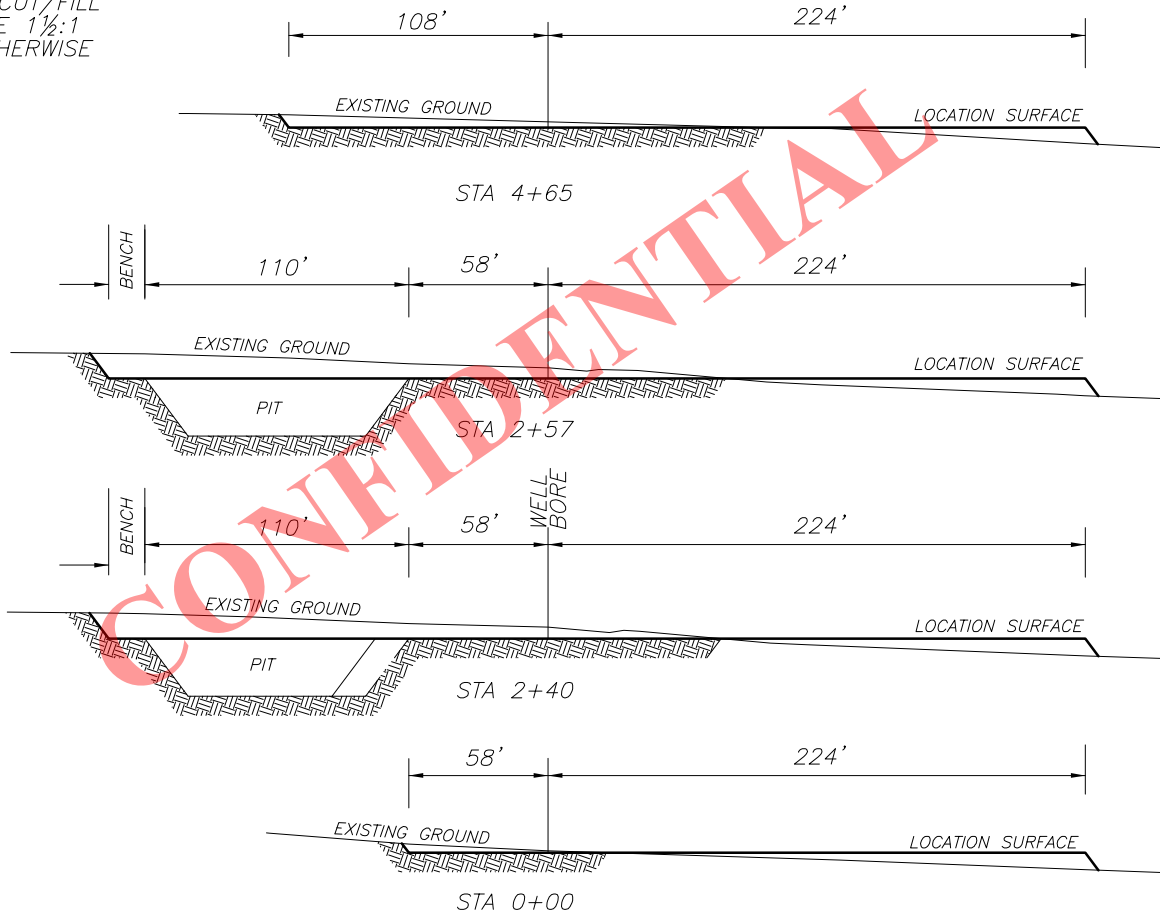
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EP ENERGY E&P COMPANY, L.P.**LOCATION LAYOUT FOR****ADELMAN 5-9C4****SECTION 9, T3S, R4W, U.S.B.&M.****1900' FNL, 900' FEL****FIGURE #2**

1"=40'
X-SECTION
SCALE
1"=80'

NOTE: ALL CUT/FILL
SLOPES ARE 1½:1
UNLESS OTHERWISE
NOTED

**APPROXIMATE YARDAGES**

TOTAL CUT (INCLUDING PIT) = 14,978 CU. YDS.

PIT CUT = 4955 CU. YDS.

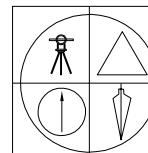
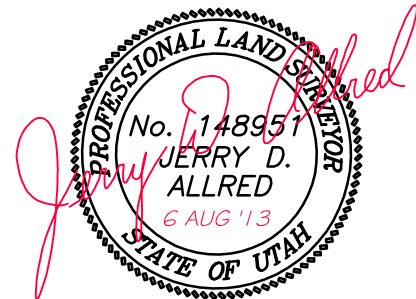
TOPSOIL STRIPPING: (6") = 3180 CU. YDS.

REMAINING LOCATION CUT = 6843 CU. YDS

TOTAL FILL = 6843 CU. YDS.

LOCATION SURFACE GRAVEL=1653 CU. YDS. (4" DEEP)

ACCESS ROAD GRAVEL=184 CU. YDS.

**JERRY D. ALLRED & ASSOCIATES**
SURVEYING CONSULTANTS1235 NORTH 700 EAST--P.O. BOX 975
DUCHESNE, UTAH 84021
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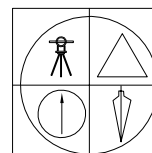
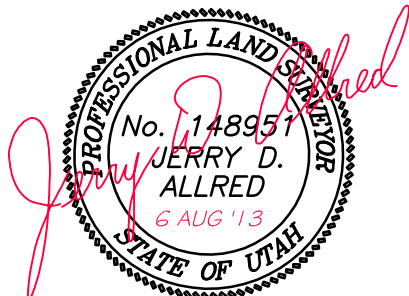
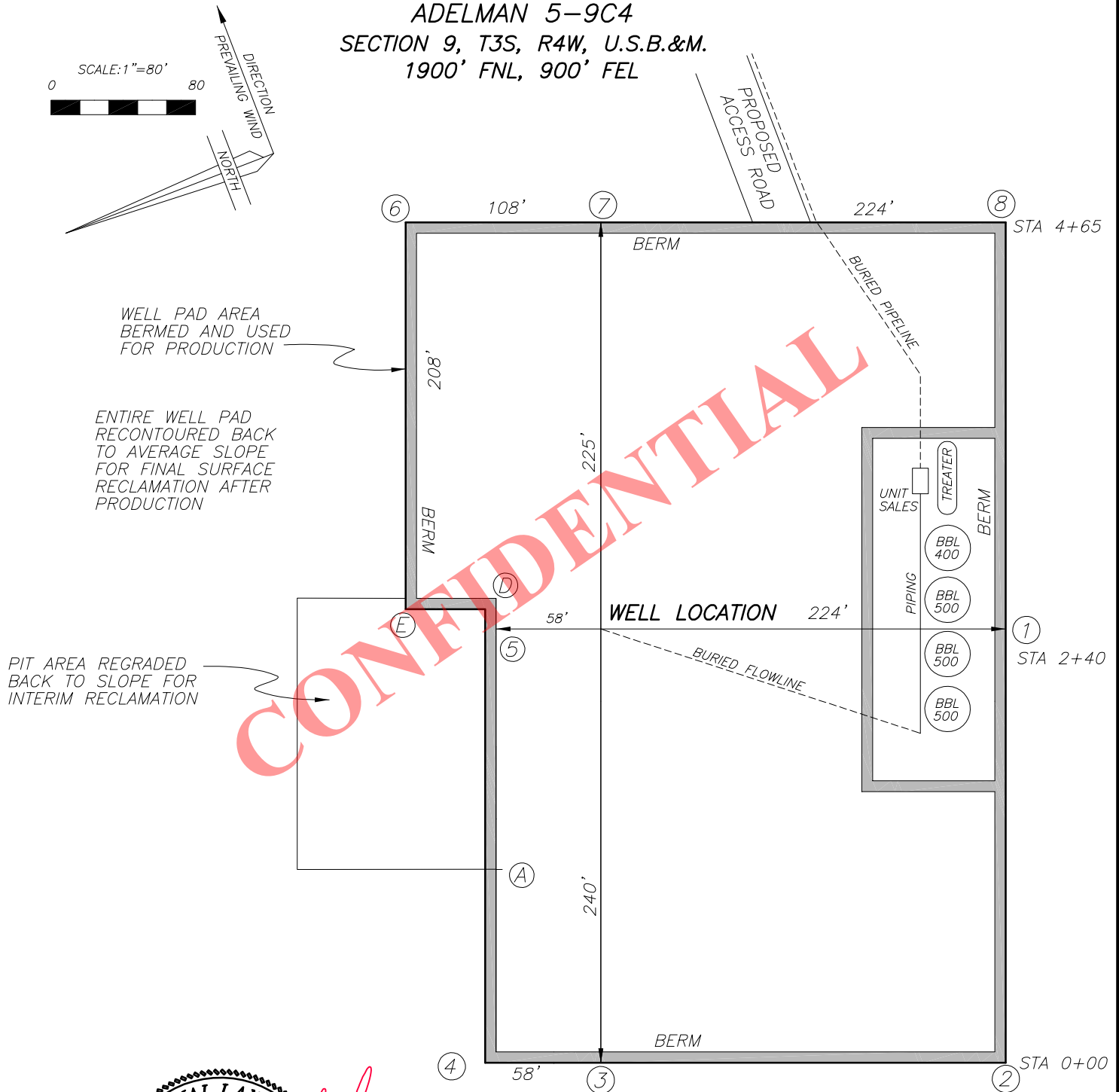
EP ENERGY E&P COMPANY, L.P.

LOCATION LAYOUT FOR

ADELMAN 5-9C4

SECTION 9, T3S, R4W, U.S.B.&M.

1900' FNL, 900' FEL

FIGURE #3**JERRY D. ALLRED & ASSOCIATES**
SURVEYING CONSULTANTS1235 NORTH 700 EAST--P.O. BOX 975
DUCHESNE, UTAH 84021
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FOUND FEDERAL
MONUMENT AT NORTH
QUARTER CORNER

S 89°29'43" W 2655.61'

SEC 4 SEC 3

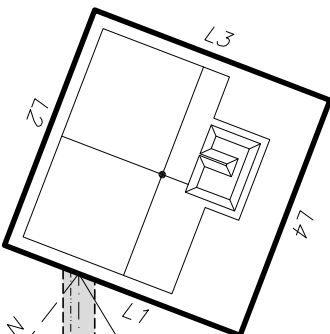
SEC 9 SEC 10

FOUND FEDERAL
MONUMENT AT
NORTHEAST CORNER

SELMA ADELMAN
PROPERTY

EP ENERGY E&P CO, L.P.

SURFACE USE AREA
ADELMAN 5-9C4
6.33 ACRES



SELMA ADELMAN
PROPERTY
SE1/4
NE1/4

PROPOSED
PIPELINE
"W" 877.32

FOUND FEDERAL
MONUMENT AT EAST
QUARTER CORNER

SCALE: 1"=400'



A diagram of a converging lens. Parallel rays of light from a distant object enter the lens from the left. The rays converge at a point on the right side of the lens. The focal length is labeled as 10 cm.

LOCATION USE AREA AND ACCESS ROAD, POWER LINE, AND PIPELINE

EP ENERGY E&P COMPANY, L.P.
ADELMAN 5-9C4

SECTION 9, T3S, R4W, U.S.B.&M.
DUCHESENE COUNTY, UTAH

USE	AREA	BOUNDARY DESCRIPTION

Commencing at a Northeast Corner of Section 9, Township 3 South, Range 4 West of the United States Base and Meridian;

Special Base 17°41'31"	West	1832.80 feet to the TRUE POINT OF BEGINNING;
Thence South 20°58'08"	West	525.00 feet;
Thence South 69°01'52"	West	525.00 feet;
Thence North 20°58'08"	East	525.00 feet;
Thence South 69°01'52"	East	525.00 feet to the TRUE POINT OF BEGINNING, containing 6.33 acres.

ACCESS ROAD, POWER LINE, AND PIPELINE CORRIDOR RIGHT-OF-WAY DESCRIPTION

A 66 feet wide access road, power line, and pipeline corridor right-of-way over portions of Section 9, Township 3 South, Range 4 West of the Uintah Special Base and Meridian, the centerline of said right-of-way being further described as follows:
Commencing at the East Quarter Corner of Section 9, Township 3 South, Range 4 West of the Uintah Special Base and Meridian;
Thence North 52°32'39" West 877.32 feet to the TRUE POINT OF BEGINNING, said point being on the East line of the EP Energy E&P Co. LLC, Adelman 5-9C4 well location use area boundary;
Thence South 89°59'41" East 644.28 feet to the East line of an existing road. Said right-of-way being 644.28 feet in length with the side lines being shortened or elongated to intersect said use area boundary.

SURVEYOR'S CERTIFICATE

This is to certify that this plat was prepared from the field notes and electronic data collector files of an actual survey made by me, or under my personal supervision, of the use area and access road, power line, and pipeline corridor right-of-way shown hereon, and that the monuments indicated were found or set during said survey, and that this plat accurately represents said survey to the best of my knowledge.

JERRY D. ALLRED, REGISTERED LAND SURVEYOR,
CERTIFICATE NO. 148951 (UTAH)

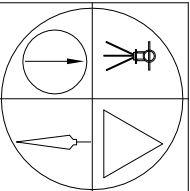


THIS SURVEY WAS PERFORMED USING GLOBAL POSITIONING SYSTEM PROCEDURES AND EQUIPMENT

THE BASIS OF BEARINGS IS GEODETIC NORTH DERIVED FROM G.P.S. OBSERVATIONS AT THE SECTION CORNER LOCATED AT LAT. 40°15'22.90258" N AND LONG. 110°23'21.19760" W USING THE UTAH STATE G.P.S. VIRTUAL REFERENCE STATION CONTROL NETWORK MAINTAINED AND OPERATED BY THE AUTOMATED GEOGRAPHIC REFERENCE CENTER

6 AUG 2013 01-128-431

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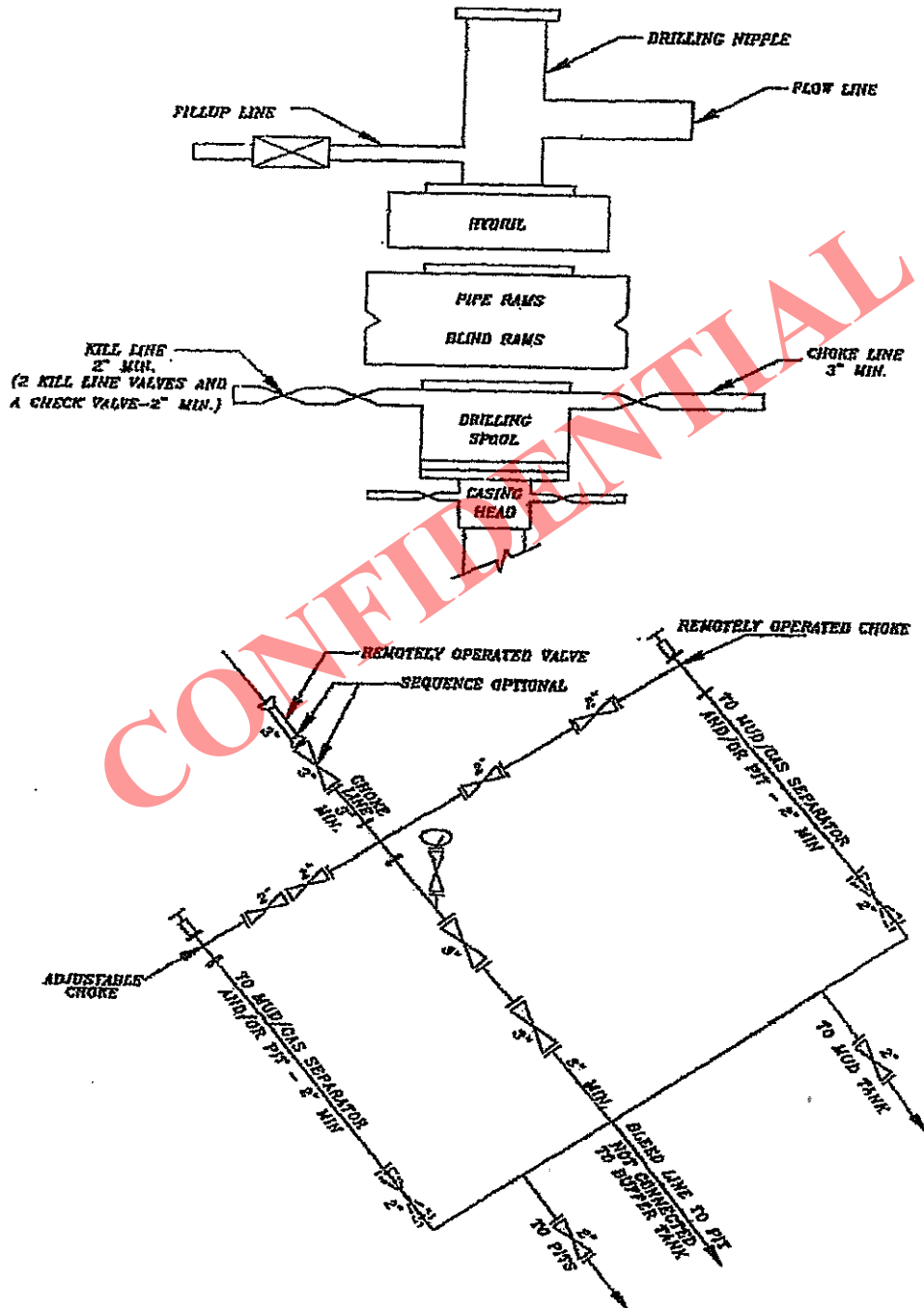


JERRY D. ALLRED AND ASSOCIATES

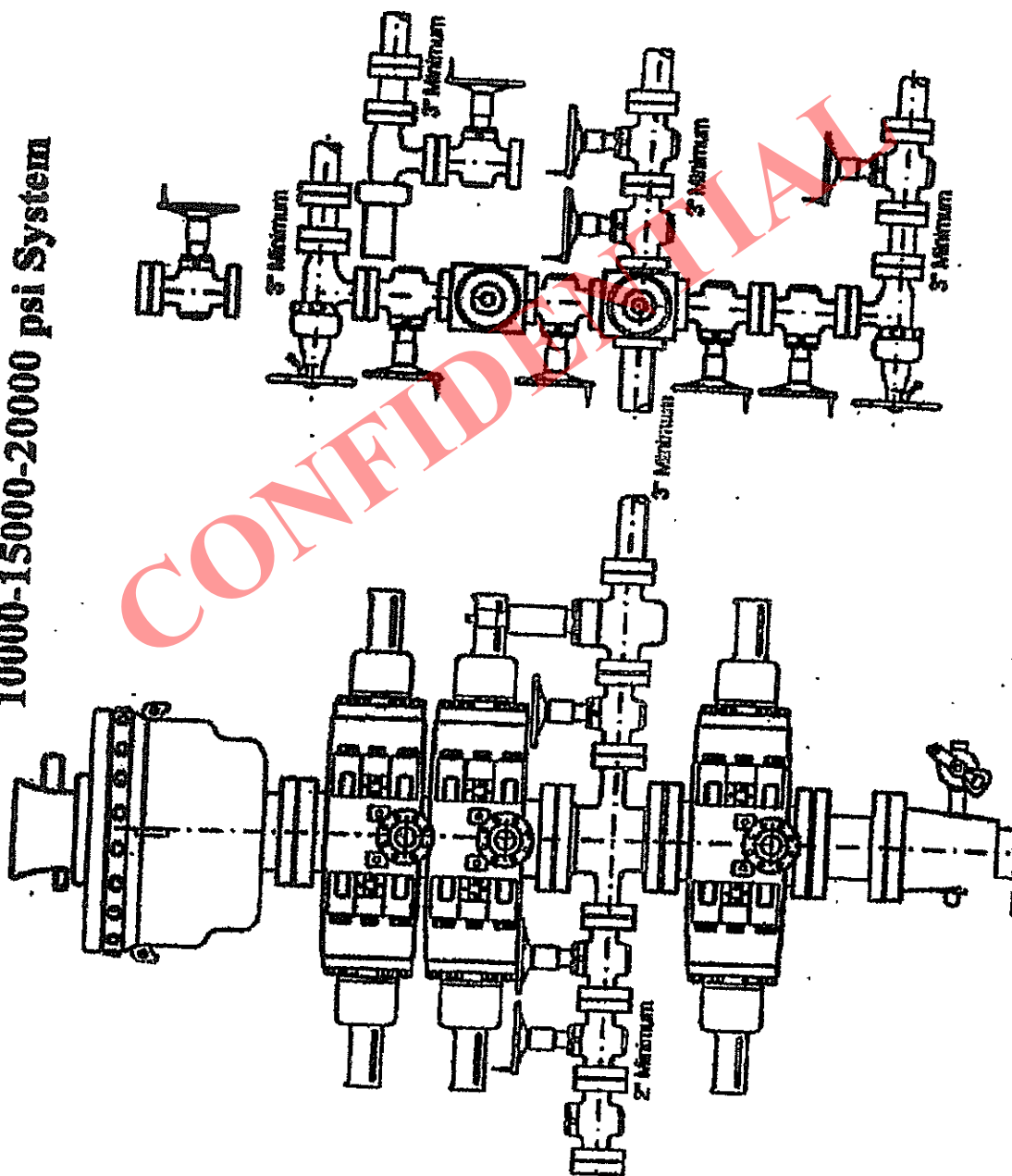
SURVEYING CONSULTANTS

1235 NORTH 700 EAST--P.O. BOX 973
DUCESNE, UTAH 84021
(435) 738-5352

5M BOP STACK and CHOKE MANIFOLD SYSTEM



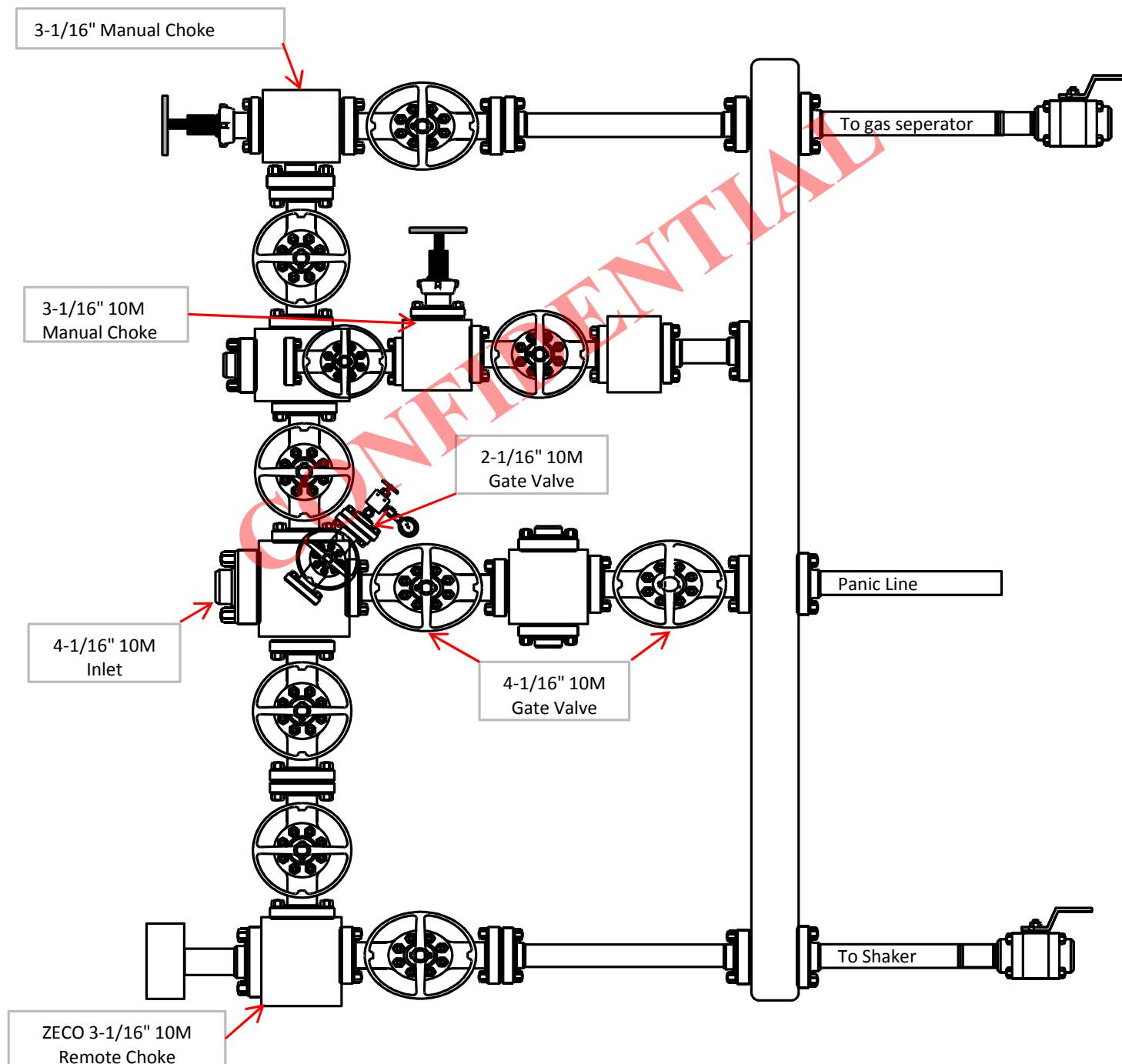
10000-15000-20000 psi System





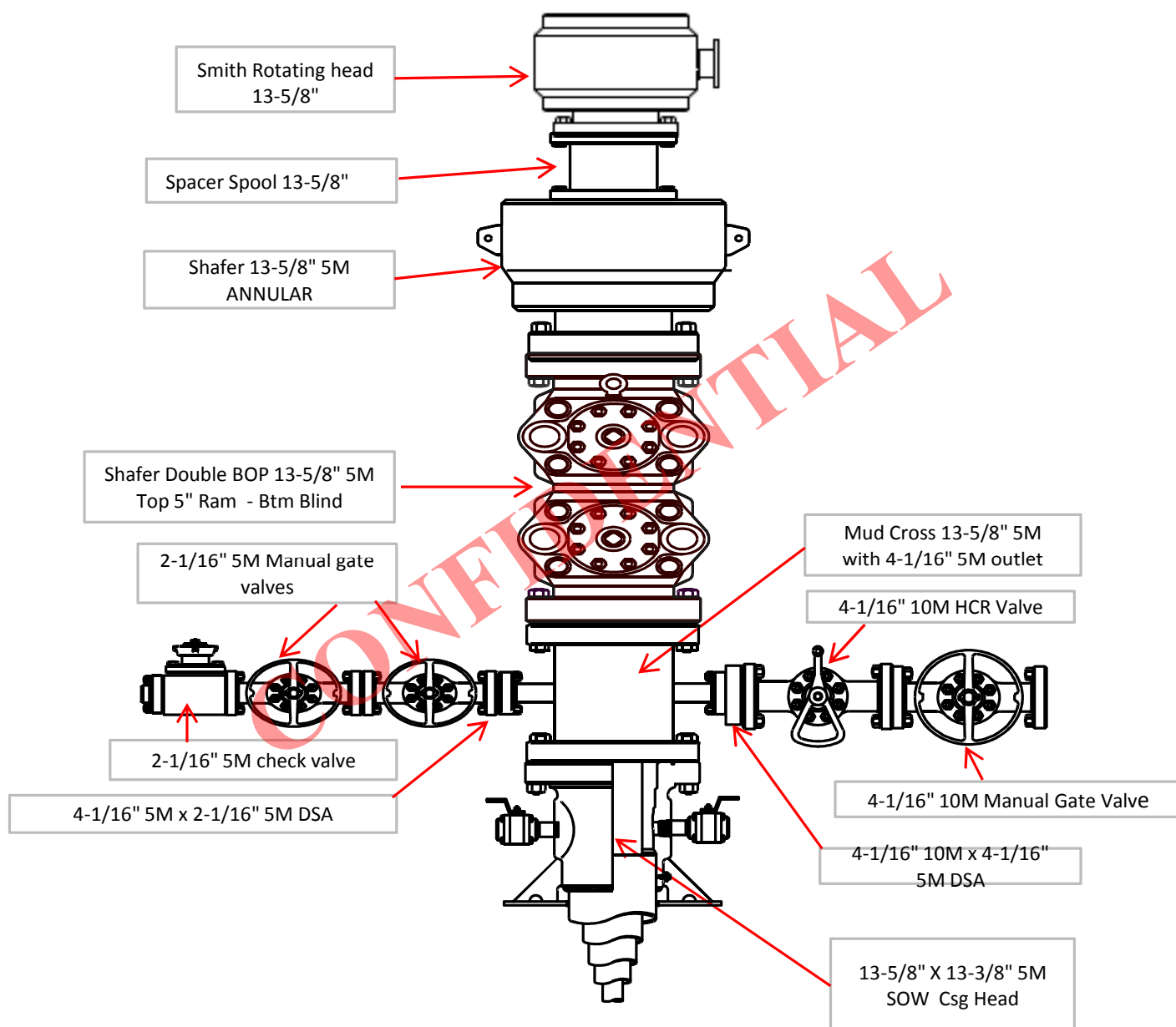
10M Choke Monifold Configuration Well: Ute Tribal 2-14A3

All valves on the Choke Monifold are 3-1/16" 10M except for those that are identified below.



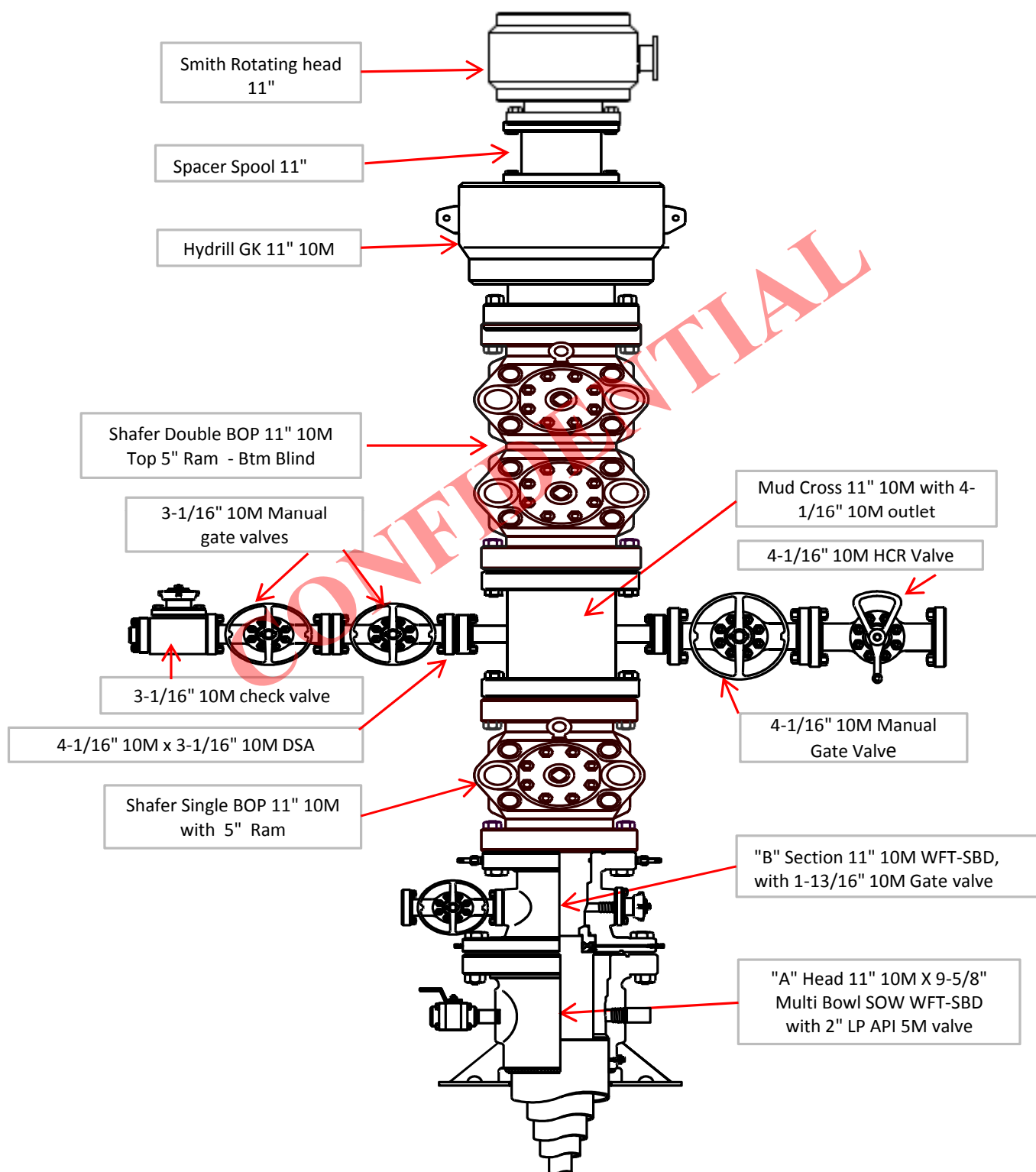


Surface 13-5/8" 5M BOP Configuration Well: Ute Tribal 2-14A3



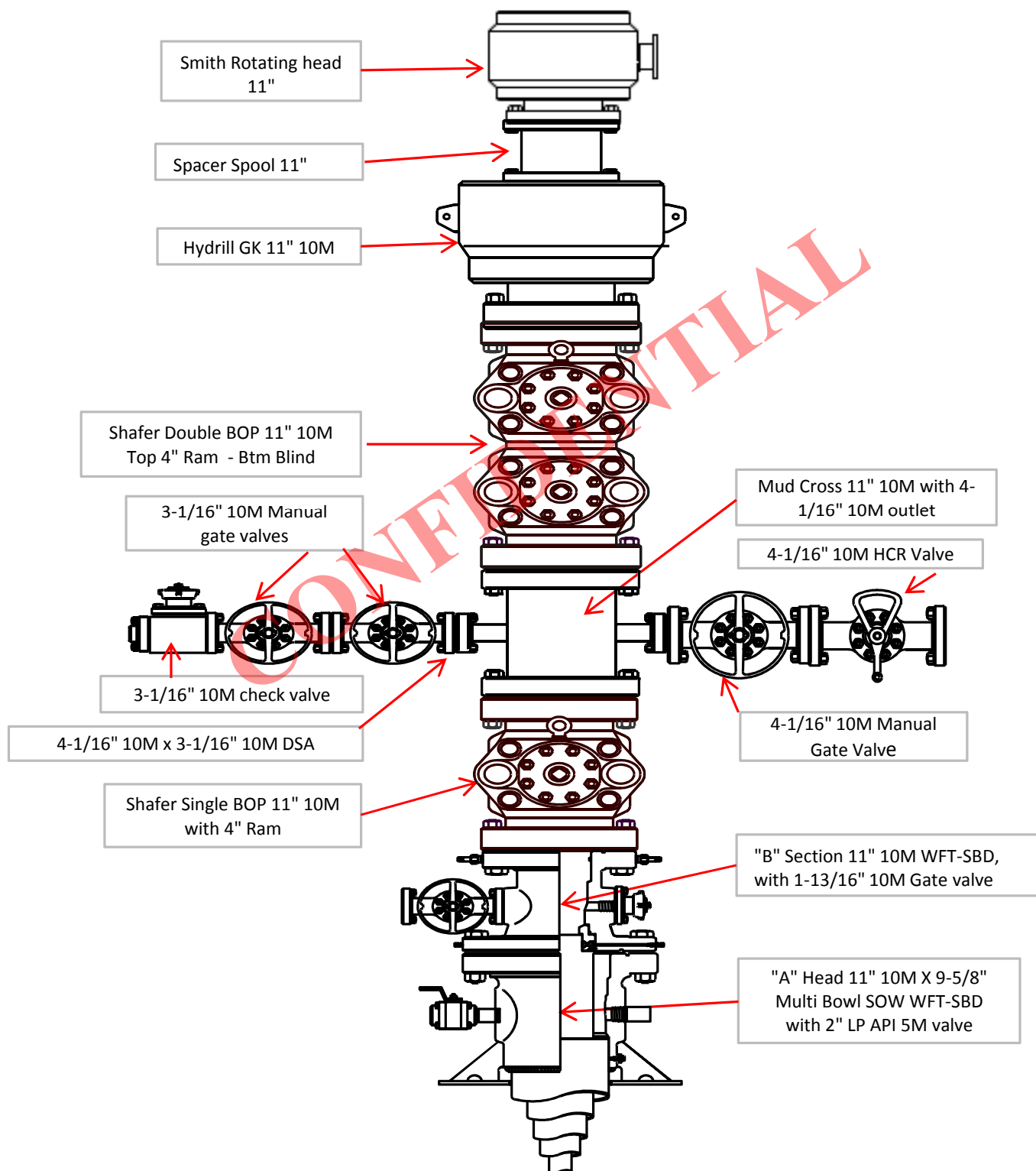


Intermediate 11" 10M BOP Configuration Well: Ute Tribal 2-14A3



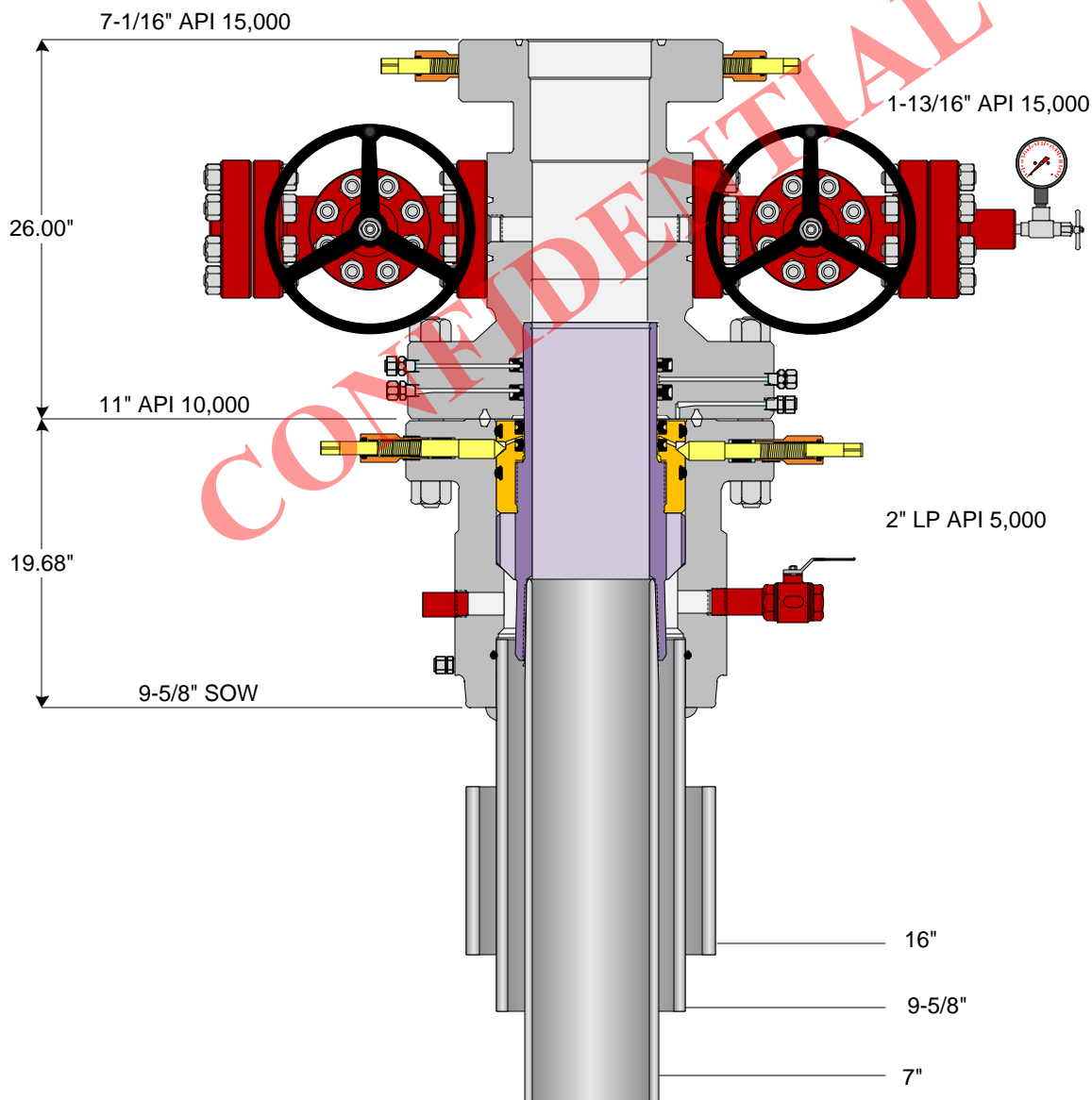


Production 11" 10M BOP Configuration Well: Ute Tribal 2-14A3



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WFT-SBD SYSTEM PRODUCTION PHASE



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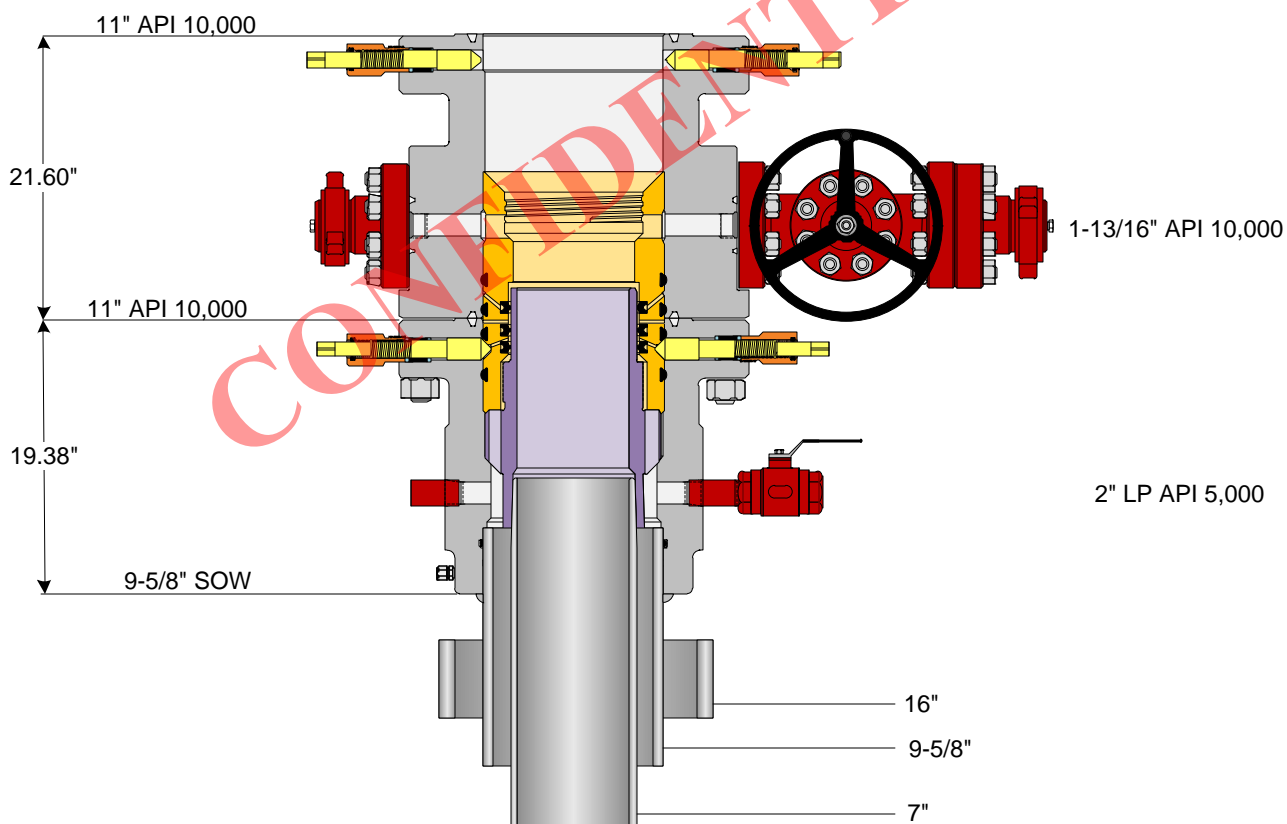
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Customer: EP ENERGY	Project No.: 75666	Quote No.: 161479
Project Name: ALTAMONT FIELD - 11" SBD SYSTEM	Date: 02-24-2013	Drawn By: RL

RECEIVED: August 21, 2013

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WFT-SBD SYSTEM DRILLING PHASE



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Customer: EP ENERGY

Project No.: 75666

Quote No.: 161479

Project Name: UTAH PROJECT – 11 IN WFT-SBD SYSTEM

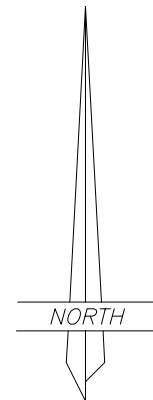
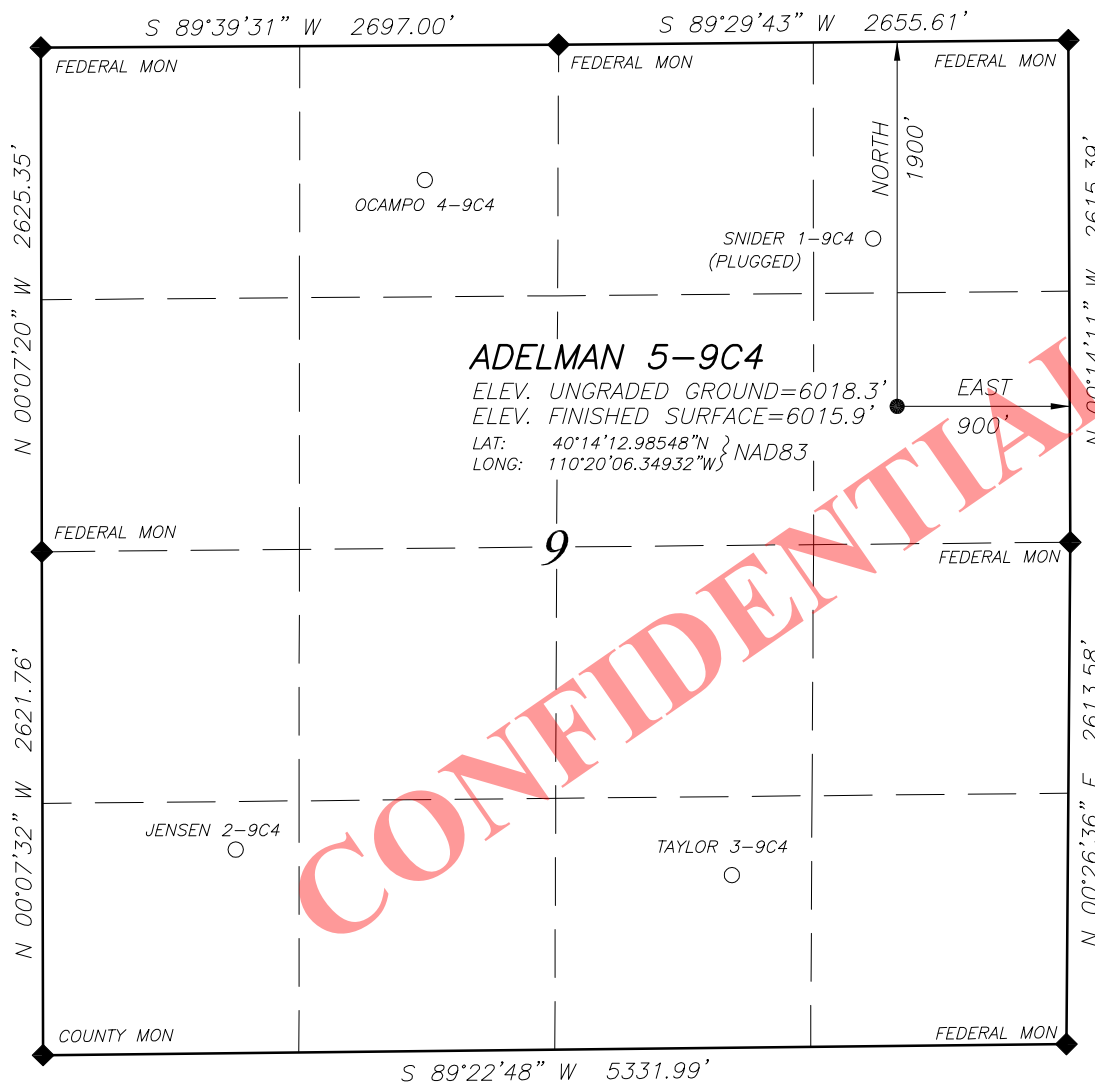
Date: 02-23-2013

Drawn By: RL

RECEIVED: August 21, 2013

EP ENERGY E&P COMPANY, L.P.**WELL LOCATION****ADELMAN 5-9C4**

LOCATED IN THE SE¼ OF THE NE¼ OF
SECTION 9, T3S, R4W, U.S.B.&M.
DUCHESNE COUNTY, UTAH



SCALE: 1"=1000'



NOTE:
NAD27 VALUES FOR
WELL POSITION:
LAT: 40.23698360° N
LONG: 110.33438631° W

LEGEND AND NOTES

◆ CORNER MONUMENTS FOUND AND USED
BY THIS SURVEY

THE GENERAL LAND OFFICE (G.L.O.) PLAT WAS
USED FOR REFERENCE AND CALCULATIONS AS
WAS THE U.S.G.S. MAP

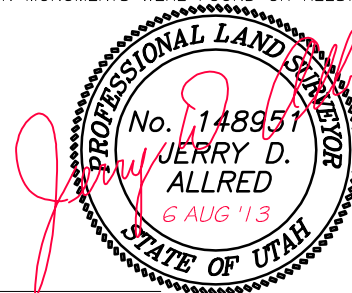
THIS SURVEY WAS PERFORMED USING GLOBAL
POSITIONING SYSTEM PROCEDURES AND EQUIPMENT

THE BASIS OF BEARINGS IS GEODETIC NORTH DERIVED
FROM G.P.S. OBSERVATIONS AT THE SECTION
CORNER LOCATED AT LAT. 40°15'22.90258"N AND
LONG. 110°23'21.19760"W USING THE UTAH
STATE G.P.S. VIRTUAL REFERENCE STATION CONTROL
NETWORK MAINTAINED AND OPERATED BY THE
AUTOMATED GEOGRAPHIC REFERENCE CENTER

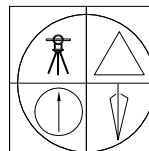
BASIS OF ELEVATIONS: NAVD 88 DATUM USING
THE UTAH REFERENCE NETWORK CONTROL SYSTEM

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM THE FIELD
NOTES AND ELECTRONIC DATA COLLECTOR FILES OF AN ACTUAL
SURVEY PERFORMED BY ME, OR UNDER MY PERSONAL SUPERVISION,
DURING WHICH THE SHOWN MONUMENTS WERE FOUND OR REESTABLISHED.



JERRY D. ALLRED, REGISTERED LAND SURVEYOR,
CERTIFICATE NO. 148951 (UTAH)



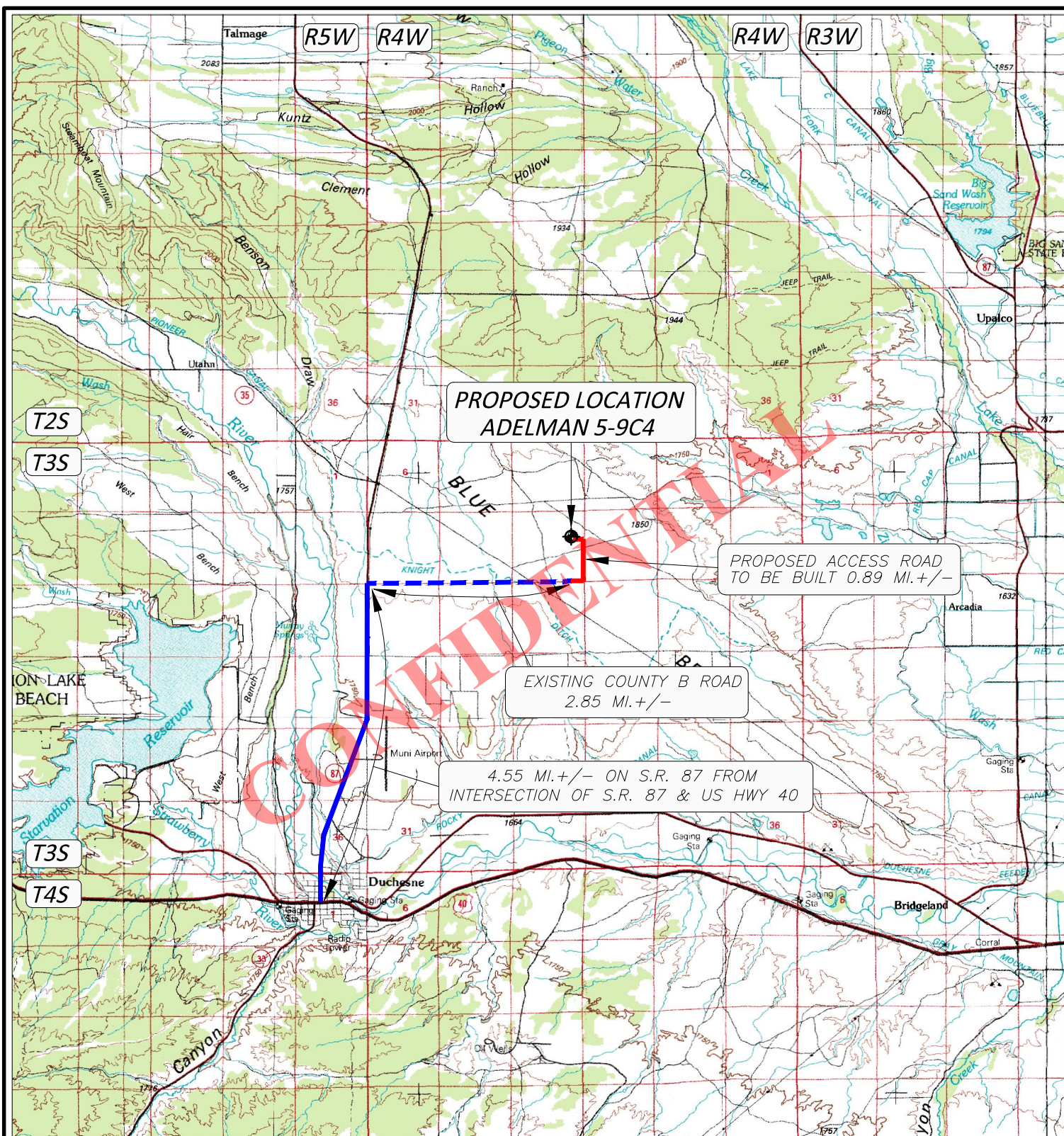
JERRY D. ALLRED & ASSOCIATES
SURVEYING CONSULTANTS

1235 NORTH 700 EAST--P.O. BOX 975
DUCHESNE, UTAH 84021
(435) 738-5352

6 AUG 2013

01-128-431

RECEIVED: August 21, 2013

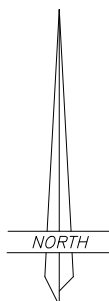
**LEGEND:**

◆ PROPOSED WELL LOCATION

01-128-431

JERRY D. ALLRED & ASSOCIATES
SURVEYING CONSULTANTS

1235 NORTH 700 EAST--P.O. BOX 975
DUCHESTER, UTAH 84021
(435) 738-5352

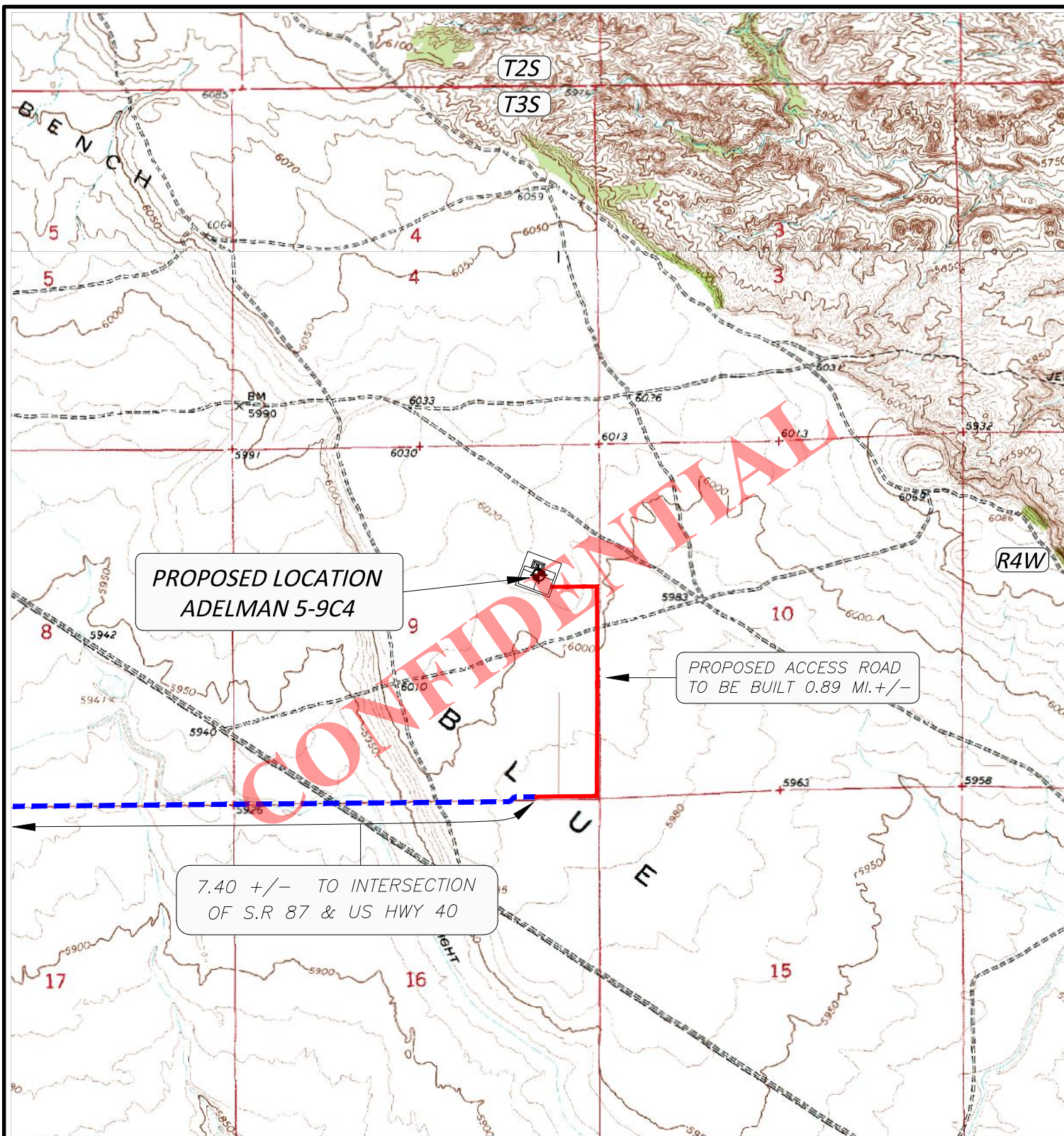
**EP ENERGY E&P COMPANY, L.P.**

ADELMAN 5-9C4
SECTION 9, T3S, R4W, U.S.B.&M.
1900' FNL 900' FEL

TOPOGRAPHIC MAP "A"

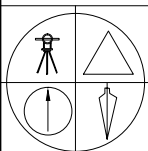
SCALE: 1"=10,000'
7 AUG 2013

RECEIVED: August 21, 2013

**LEGEND:**

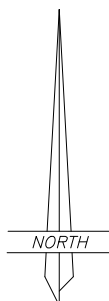
- PROPOSED WELL LOCATION**
- PROPOSED ACCESS ROAD**
- EXISTING GRAVEL ROAD**
- EXISTING PAVED ROAD**

01-128-431



JERRY D. ALLRED & ASSOCIATES
SURVEYING CONSULTANTS

1235 NORTH 700 EAST--P.O. BOX 975
DUCHESE, UTAH 84021
(435) 738-5352

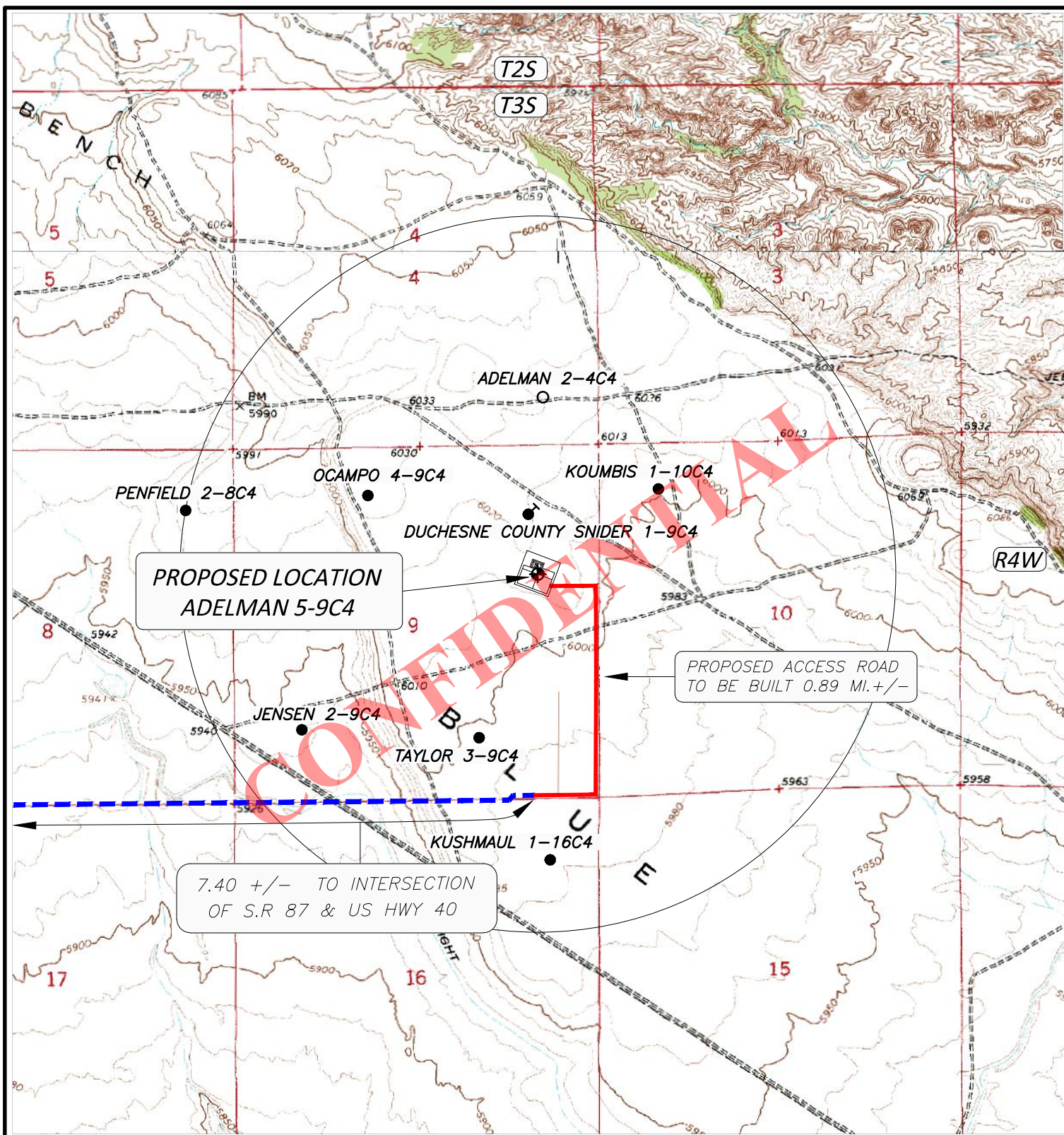
**EP ENERGY E&P COMPANY, L.P.**

ADELMAN 5-9C4
SECTION 9, T3S, R4W, U.S.B.&M.
1900' FNL 900' FEL

TOPOGRAPHIC MAP "B"

SCALE: 1"=2000'
7 AUG 2013

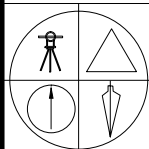
RECEIVED: August 21, 2013

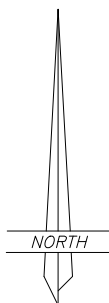
**LEGEND:**
PROPOSED WELL LOCATION

2-25C6



01-128-431


JERRY D. ALLRED & ASSOCIATES
 SURVEYING CONSULTANTS

 1235 NORTH 700 EAST--P.O. BOX 975
 DUCHESNE, UTAH 84021
 (435) 738-5352
**EP ENERGY E&P COMPANY, L.P.**
ADELMAN 5-9C4
SECTION 9, T3S, R4W, U.S.B.&M.
1900' FNL 900' FEL
TOPOGRAPHIC MAP "C"
 SCALE: 1"=2000'
 7 AUG 2013
RECEIVED: August 21, 2013

AFFIDAVIT OF DAMAGE SETTLEMENT AND RELEASE

Michael J. Walcher personally appeared before me, and, being duly sworn, deposes and says:

1. My name is Michael J. Walcher. I am a Sr. Staff Landman for EP Energy E&P Company, L.P., whose address is 1001 Louisiana St., Houston, Texas 77002 ("EP Energy").
2. EP Energy is the operator of the proposed Adelman 5-9C4 well (the "Well") to be located in the SE/4 NE/4 of Section 9, Township 3 South, Range 4 West, USM, Duchesne County, Utah (the "Drillsite Location"). The surface owner of the Drillsite Location is Selma L. Adelman, whose address is 9255 Doheny Rd. No. 1402 Los Angeles, California 90069 (the "Surface Owner"). The Surface Owner's telephone number is (310) 275-1582.
3. EP Energy and the Surface Owner have entered into a Damage Settlement and Release Agreement dated June 25, 2013 to cover any and all injuries or damages of every character and description sustained by the Surface Owner or Surface Owner's property as a result of operations associated with the drilling of the Well.

FURTHER AFFIANT SAYETH NOT.


Michael J. Walcher

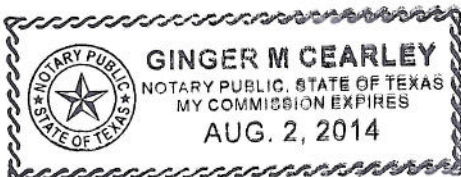
ACKNOWLEDGMENT

STATE OF TEXAS §
 §
CITY AND COUNTY OF HARRIS §

Before me, a Notary Public, in and for this state, on this ^{2nd}~~20th~~ day of ^{July}~~June~~, 2013, personally appeared Michael J. Walcher, to me known to be the identical person who executed the within and foregoing instrument, and acknowledged to me that he executed the same as his own free and voluntary act and deed for the uses and purposes therein set forth.


NOTARY PUBLIC

My Commission Expires:



EP Energy E&P Company, L.P.

Related Surface Information

1. Current Surface Use:

- Livestock Grazing and Oil and Gas Production.

2. Proposed Surface Disturbance:

- The road will be crown and ditch. Water wings will be constructed on the access road as needed.
- The topsoil will be windrowed and re-spread in the borrow area.
- New road to be constructed will be approximately .89 miles in length and 66 feet wide.
- All equipment and vehicles will be confined to the access road, pad and area specified in the APD.

3. Location Of Existing Wells:

- Existing oil, gas wells within one (1) mile radius of proposed well are provided in EXHIBIT C.

4. Location And Type Of Drilling Water Supply:

- Drilling water: Duchesne City Water

5. Existing/Proposed Facilities For Productive Well:

- There are no existing facilities that will be utilized for this well.
- A pipeline corridor .89 miles will parallel the proposed access road. The corridor will contain one 4 inch gas line and one 2 inch gas line and one 2 inch Salt Water disposal line. Rehabilitation of unneeded, previously disturbed areas will consist of backfilling and contouring the reserve pit area; backsloping and contouring all cut and fill slopes. These areas will be reseeded. Refer to plans for reclamation of surface for details.
- Upgrade and maintain access roads and drainage control structures (e.g., culverts, drainage dips, ditching, etc.) as necessary to prevent soil erosion and accommodate safe, year-round traffic.

6. Construction Materials:

- Native soil from road and location will be used for construction materials along with gravel and/or scoria road base material. In the event that conditions should necessitate graveling of all or part of the access road and location, surfacing materials will be purchased from commercial suppliers in the marketing area.

7. Methods For Handling Waste Disposal:

- The reserve pit will be designed to prevent the collection of surface runoff and will be constructed with a minimum of ½ the total depth below the original ground surface on the lowest point with the pit. The pit will be lined with a 20-mil polyethylene to prevent leakage of fluids. The liner will be rolled into place and secured at the ends, i.e. buried on top of the pit berms. Prior to use, the reserve pit will be fenced on three sides; the fourth side will be fenced at the time the rig is removed. Drilling fluids, cuttings and produced water will be contained in the reserve pit (trash will be placed in the trash cage). Fluids in the reserve pit will be allowed to evaporate prior to pit burial.
- Garbage and other trash will be contained in the portable trash cage and hauled off the location to an authorized disposal site. Any trash on the pad will be cleaned up prior to the rig moving off location and hauled to an authorized disposal site.
- Sewage will be handled in Portable Toilets.
- Produced water will be placed in the reserve pit for a period not to exceed ninety days after initial production. Any hydrocarbons produced during completion work will be contained in test tanks and removed from the location at a later date.
- Water from the reserve pit may be used for drilling of additional wells. The water will be trucked along access roads as approved in pertinent APD's

8. Ancillary Facilities:

- There will be no ancillary facilities associated with this project.

9. **Surface Reclamation Plans:**

Backfilling of the pits will be done when dry. In the event of a dry hole, the location will be re-contoured, the topsoil will be distributed evenly over the entire location, and the seedbed prepared.

- Seed will be planted after September 15th, and prior to ground frost, or seed will be planted after the frost has left and before May 15th. Slopes to steep for machinery will be hand broadcast and raked with twice the specified amount of seed.
 1. The construction program and design are on the attached cut, fill and cross sectional diagrams.
 2. Prior to construction, all topsoil will be removed from the entire site and stockpiled. Topsoil for this site is the first 6 inches of soil materials.
 3. After the location has been reshaped and after redistributing the topsoil, the operator will rip and scarify the drilling platform and access road on the contour, to a depth of at least 12 inches.
- Rehabilitation will begin upon the completion of the drilling. Complete rehabilitation will depend on weather conditions and the amount of time required to dry the reserve pit.
 1. All rehabilitation work including seeding will be completed as soon as weather and the reserve pit conditions are appropriate.
 2. Landowner will be contacted for rehabilitation requirements.

10. **Surface Ownership:**

Selma L. Adelman
9255 Doheny Rd, No. 1402
Los Angeles, California 90069
310-275-1582

Other Information:

- The surface soil consists of clay, and silt.
- Flora – vegetation consists of the following: Sagebrush, Juniper and prairie grasses.
- Fauna – antelope, deer, coyotes, raptors, small mammals, and domestic grazing animals.
- Current surface uses – Livestock grazing and mineral exploration and production.

• **Operator and Contact Persons:**

Construction and Reclamation:

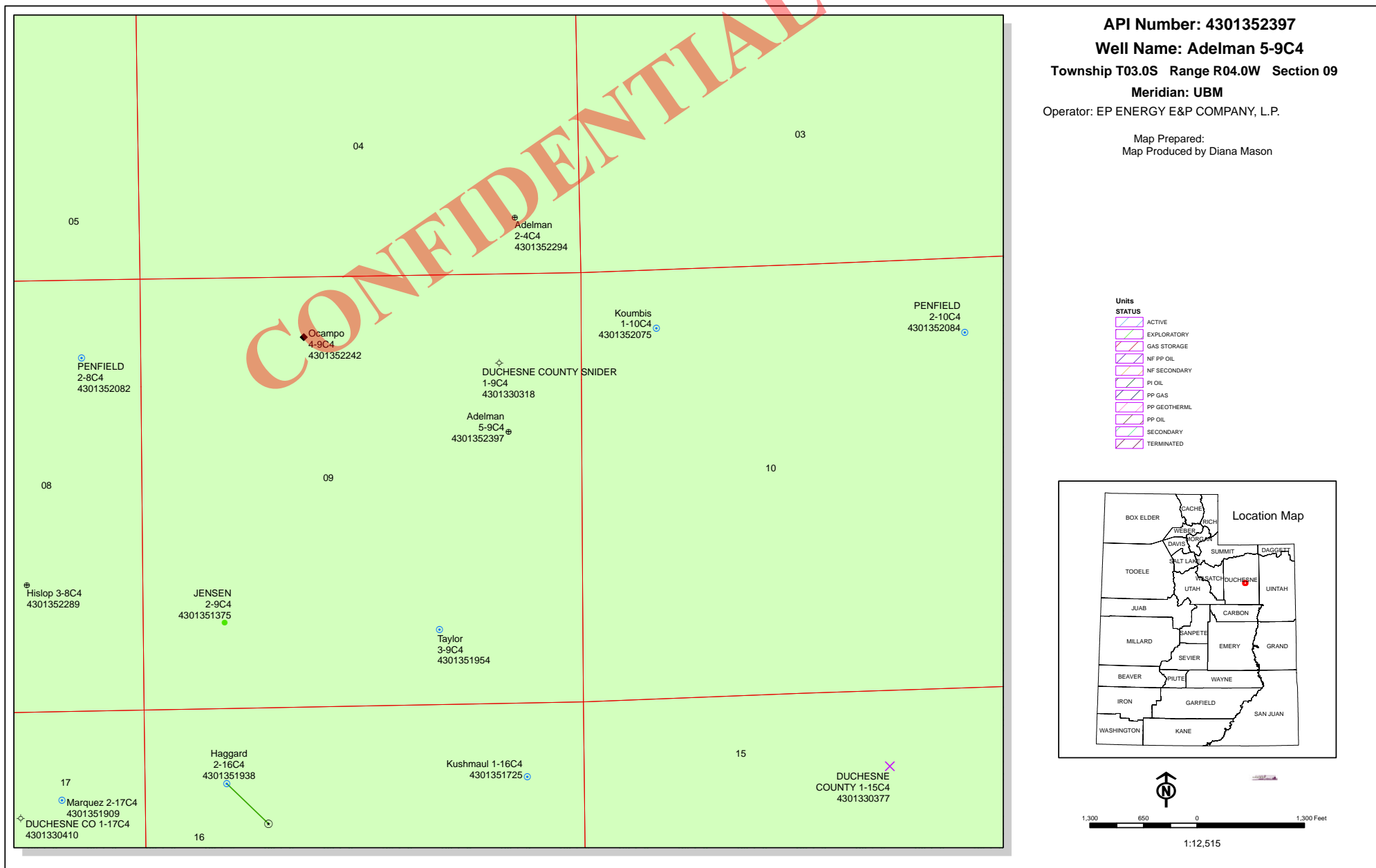
EP Energy E&P Company, L.P.
Wayne Garner
PO Box 410
Altamont, Utah 84001
435-454-3394 – Office
435-823-1490 – Cell

Regarding This APD

EP Energy E&P Company, L.P.
Maria S. Gomez
1001 Louisiana, Rm 2730D
Houston, Texas 77002
713-997-5038 – Office

Drilling

EP Energy E&P Company, L.P.
Brad MacAfee – Drilling Engineer
1001 Louisiana, Rm 2660D
Houston, Texas 77002
713-997-6383 – office
281-813-0902 – Cell



Well Name	EP ENERGY E&P COMPANY, L.P. Adelman 5-9C4 43013523970000			
String	Cond	Surf	I1	L1
Casing Size(in)	13.375	9.625	7.000	5.000
Setting Depth (TVD)	600	2500	9400	12600
Previous Shoe Setting Depth (TVD)	0	600	2500	9400
Max Mud Weight (ppg)	8.8	9.5	10.6	13.7
BOPE Proposed (psi)	1000	1000	5000	10000
Casing Internal Yield (psi)	2730	5750	11220	13940
Operators Max Anticipated Pressure (psi)	8976			13.7

Calculations	Cond String	13.375	"
Max BHP (psi)	.052*Setting Depth*MW=	275	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	203	YES <input type="checkbox"/> rotating head on structural pipe
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	143	YES <input type="checkbox"/> OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	143	NO <input type="checkbox"/> OK <input type="checkbox"/>
Required Casing/BOPE Test Pressure=		600	psi
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi *Assumes 1psi/ft frac gradient

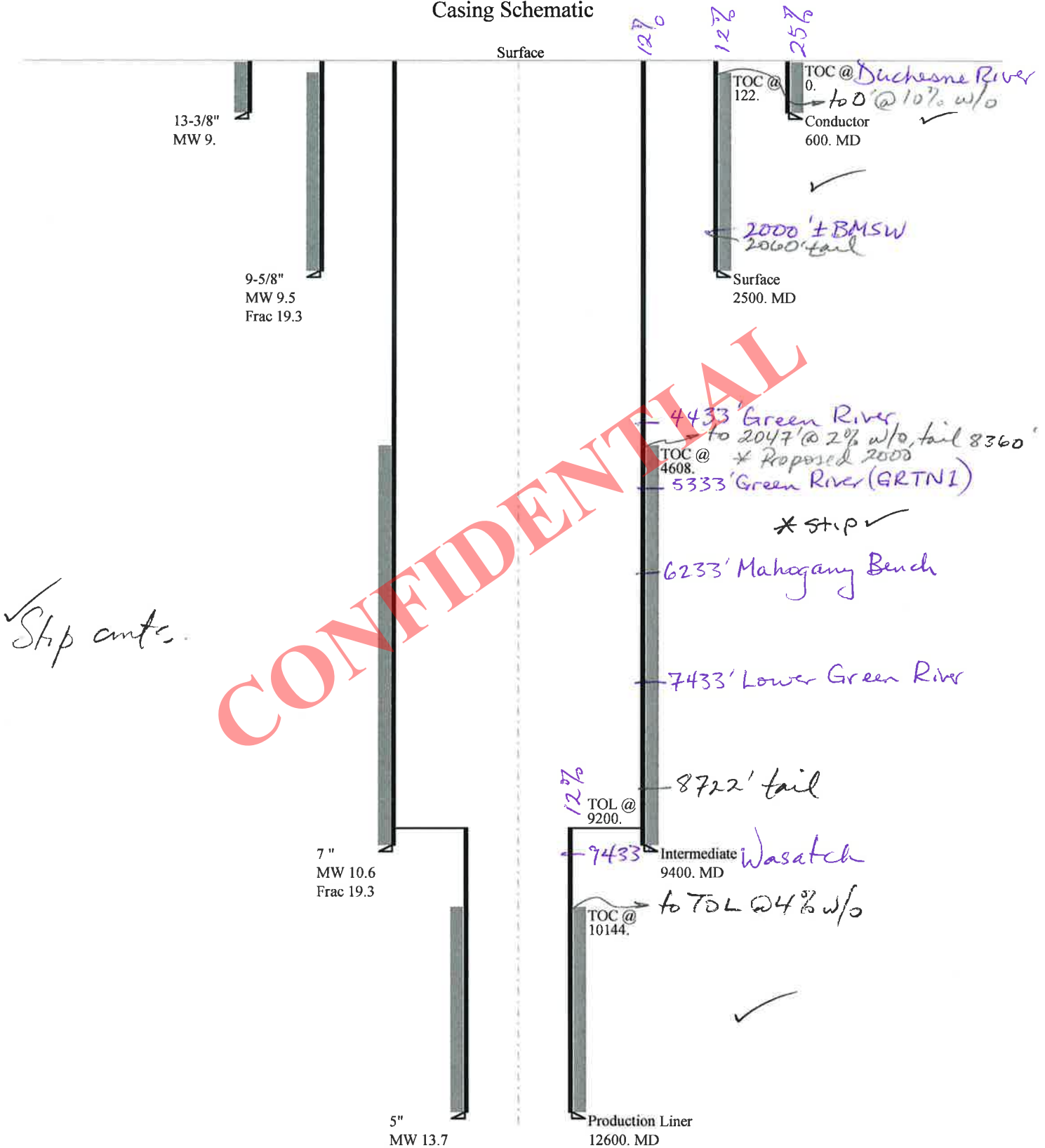
Calculations	Surf String	9.625	"
Max BHP (psi)	.052*Setting Depth*MW=	1285	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	935	YES <input type="checkbox"/> Smith rotating head
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	685	YES <input type="checkbox"/> OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	817	NO <input type="checkbox"/> OK <input type="checkbox"/>
Required Casing/BOPE Test Pressure=		2500	psi
*Max Pressure Allowed @ Previous Casing Shoe=		600	psi *Assumes 1psi/ft frac gradient

Calculations	I1 String	7.000	"
Max BHP (psi)	.052*Setting Depth*MW=	5181	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	4053	YES <input type="checkbox"/> 5M BOPE, 5M kill lines & choke manifold
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	3113	YES <input type="checkbox"/> OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	3663	NO <input type="checkbox"/> OK <input type="checkbox"/>
Required Casing/BOPE Test Pressure=		7854	psi
*Max Pressure Allowed @ Previous Casing Shoe=		2500	psi *Assumes 1psi/ft frac gradient

Calculations	L1 String	5.000	"
Max BHP (psi)	.052*Setting Depth*MW=	8976	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	7464	YES <input type="checkbox"/> 10M BOPE w/rotating head, 5M annular,
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	6204	YES <input type="checkbox"/> blind rams & mud cross
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	8272	YES <input type="checkbox"/> OK <input type="checkbox"/>
Required Casing/BOPE Test Pressure=		9758	psi
*Max Pressure Allowed @ Previous Casing Shoe=		9400	psi *Assumes 1psi/ft frac gradient

43013523970000 Adelman 5-9C4

Casing Schematic



Well name:	43013523970000 Adelman 5-9C4	
Operator:	EP ENERGY E&P COMPANY, L.P.	
String type:	Conductor	Project ID: 43-013-52397
Location:	DUCHESNE COUNTY	

Design parameters:**Collapse**

Mud weight: 9.000 ppg
Design is based on evacuated pipe.

Minimum design factors:**Collapse:**

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 82 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,000 ft

Cement top: Surface

Burst

Max anticipated surface pressure: 208 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 280 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Non-directional string.

Tension is based on air weight.
Neutral point: 520 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	600	13.375	54.50	J-55	ST&C	600	600	12.49	7444

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	280	1130	4.029	280	2730	9.73	32.7	514	15.72 J

Prepared Helen Sadik-Macdonald
by: Div of Oil, Gas & Mining

Phone: 801 538-5357
FAX: 801-359-3940

Date: September 9, 2013
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 600 ft, a mud weight of 9 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	43013523970000 Adelman 5-9C4	
Operator:	EP ENERGY E&P COMPANY, L.P.	
String type:	Surface	Project ID: 43-013-52397
Location:	DUCHESNE COUNTY	

Design parameters:**Collapse**

Mud weight: 9.500 ppg
Design is based on evacuated pipe.

Minimum design factors:**Collapse:**

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 109 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: 122 ft

Burst

Max anticipated surface pressure: 1,950 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 2,500 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.70 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on air weight.
Neutral point: 2,147 ft

Non-directional string.**Re subsequent strings:**

Next setting depth: 9,400 ft
Next mud weight: 10.600 ppg
Next setting BHP: 5,176 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,500 ft
Injection pressure: 2,500 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	2500	9.625	40.00	N-80	LT&C	2500	2500	8.75	31811

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	1234	3090	2.505	2500	5750	2.30	100	737	7.37 J

Prepared Helen Sadik-Macdonald
by: Div of Oil, Gas & Mining

Phone: 801 538-5357
FAX: 801-359-3940

Date: September 9, 2013
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2500 ft, a mud weight of 9.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	43013523970000 Adelman 5-9C4	
Operator:	EP ENERGY E&P COMPANY, L.P.	
String type:	Intermediate	Project ID: 43-013-52397
Location:	DUCHESNE COUNTY	

Design parameters:**Collapse**

Mud weight: 10.600 ppg
Design is based on evacuated pipe.

Minimum design factors:**Collapse:**

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 206 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,000 ft

Cement top: 4,608 ft

Burst

Max anticipated surface pressure: 6,195 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 8,263 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Tension is based on air weight.
Neutral point: 7,892 ft

Non-directional string.**Re subsequent strings:**

Next setting depth: 12,600 ft
Next mud weight: 13.700 ppg
Next setting BHP: 8,967 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 9,400 ft
Injection pressure: 9,400 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	9400	7	29.00	HCP-110	LT&C	9400	9400	6.059	106150
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	5176	9200	1.777	8263	11220	1.36	272.6	797	2.92 J

Prepared Helen Sadik-Macdonald
by: Div of Oil, Gas & Mining

Phone: 801 538-5357
FAX: 801-359-3940

Date: September 9, 2013
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 9400 ft, a mud weight of 10.6 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	43013523970000 Adelman 5-9C4	
Operator:	EP ENERGY E&P COMPANY, L.P.	
String type:	Production Liner	Project ID: 43-013-52397
Location:	DUCHESNE COUNTY	

Design parameters:**Collapse**

Mud weight: 13.700 ppg
Design is based on evacuated pipe.

Minimum design factors:**Collapse:**

Design factor 1.125

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 250 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,000 ft

Burst:

Design factor 1.00

Cement top: 10,144 ft

Burst

Max anticipated surface pressure: 6,195 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 8,967 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Liner top: 9,200 ft
Non-directional string.

Tension is based on air weight.
Neutral point: 11,891 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	3400	5	18.00	HCP-110	ST-L	12600	12600	4.151	269280
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	8967	15360	1.713	8967	13940	1.55	61.2	341	5.57 J

Prepared Helen Sadik-Macdonald
by: Div of Oil, Gas & Mining

Phone: 801-538-5357
FAX: 801-359-3940

Date: September 9, 2013
Salt Lake City, Utah

Remarks:

For this liner string, the top is rounded to the nearest 100 ft. Collapse is based on a vertical depth of 12600 ft, a mud weight of 13.7 ppg. The Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator EP ENERGY E&P COMPANY, L.P.
Well Name Adelman 5-9C4
API Number 43013523970000 **APD No** 8468 **Field/Unit** ALTAMONT
Location: 1/4,1/4 SENE **Sec 9 Tw** 3.0S **Rng** 4.0W 1900 FNL 900 FEL
GPS Coord (UTM) 556557 4454270 **Surface Owner** Selma L. Adelman

Participants

Jared Thacker (EP Energy); Dennis Ingram (DOGM)

Regional/Local Setting & Topography

The proposed Adelman 5-9C4 well site is located in northeastern Utah approximately 4.55 miles north of Duchesne along highway 87, then easterly along an existing county road for 2.85 miles, then north another 0.89 miles on a new access road into location. The surface is relatively flat but slopes slightly to the south/southwest. The surface topography changes little across Blue Bench, which is mostly flat, open rangeland that was once irrigated to grow alfalfa. The surface does change approximately 4.0 miles to the west where this bench habitat drops off into the Duchesne River Drainage; the topography also slopes gently in a southerly direction until it reaches the Duchesne River Drainage some two plus miles away. To the north, broken sandstone shelves are common as the elevation rises into pinion juniper habitat.

Surface Use Plan

Current Surface Use

Recreational
Residential

New Road Miles

0.89

Well Pad

Width 307 **Length** 465

Src Const Material

Onsite

Surface Formation

UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Y

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Dense sagebrush, bitter brush, grasses, prickly pear cactus; potential mule deer, coyote, rabbit, and smaller mammals, birds native to region, no perching available.

Soil Type and Characteristics

Reddish, fine-grained sandy loam with some clays.

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diversion Required? N**Berm Required? Y****Erosion Sedimentation Control Required? N****Paleo Survey Run? N Paleo Potential Observed? N Cultural Survey Run? N Cultural Resources? N****Reserve Pit****Site-Specific Factors****Site Ranking**

Distance to Groundwater (feet)	>200	0
Distance to Surface Water (feet)	>1000	0
Dist. Nearest Municipal Well (ft)	>5280	0
Distance to Other Wells (feet)	>1320	0
Native Soil Type	High permeability	20
Fluid Type	Fresh Water	5
Drill Cuttings	Normal Rock	0
Annual Precipitation (inches)		0
Affected Populations		
Presence Nearby Utility Conduits	Not Present	0
Final Score		25 1 Sensitivity Level

Characteristics / Requirements

Proposed reserve pit staked on the north side of location in cut, measuring 110' wide by 150' long by 12' deep with prevailing winds from the west.

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 20 Pit Underlayment Required?**Other Observations / Comments**

Surface slopes to the southwest, nearly flat, open sagebrush lands, no drainages or issues.

Dennis Ingram
Evaluator

10/3/2013
Date / Time

Application for Permit to Drill

Statement of Basis

Utah Division of Oil, Gas and Mining

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
8468	43013523970000	LOCKED	OW	P	No
Operator	EP ENERGY E&P COMPANY, L.P.		Surface Owner-APD	Selma L. Adelman	
Well Name	Adelman 5-9C4		Unit		
Field	ALTAMONT		Type of Work	DRILL	
Location	SENE 9 3S 4W U 1900 FNL 900 FEL GPS Coord (UTM) 556557E 4454263N				

Geologic Statement of Basis

El Paso proposes to set 600 feet of conductor and 2,500 feet of surface casing both of which will be cemented to surface. The surface and intermediate holes will be drilled utilizing fresh water mud. The estimated depth to the base of moderately saline ground water is 2,000 feet. A search of Division of Water Rights records indicates that there are 5 water wells within a 10,000 foot radius of the center of Section 9. Wells range between 285 and 500 feet in depth and are used for irrigation, stock watering, domestic and oilfield purposes. These wells probably produce from the Duchesne River Formation. The Duchesne River Formation is made up of sandstones with interbedded shales and is the most prominent fresh water aquifer in the area. The proposed casing and cement program should adequately protect ground water in this area.

Brad Hill
APD Evaluator

10/16/2013
Date / Time

Surface Statement of Basis

A presite visit was scheduled and done on October 3, 2013 to take input and address issues regarding the construction and drilling of the Adelman 3-15C4 well. Selma Adelman was shown as the landowner of record and therefore invited to the presite meeting prior to the visit but did not attend presite. A signed landowner agreement is in place.

The immediate surface area is rangeland with dense sagebrush type habitat, some housing and trailer houses further to the west. The surface slopes gently to the south/southwest and does not have any drainage issues. The reserve pit shall be constructed immediately off the north side of the location. The operator shall install a 20 mil synthetic liner in the pit as stipulation on the operations plan to prevent seepage in this sandy soil. The reserve pit shall be wire net fenced prevent cattle from entering location. No surface issues with this proposed location site.

Dennis Ingram
Onsite Evaluator

10/3/2013
Date / Time

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 16 mils shall be properly installed and maintained in the reserve pit.
Pits	The reserve pit should be located on the north side of the location.
Surface	The well site shall be bermed to prevent fluids from leaving the pad.

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 8/21/2013

API NO. ASSIGNED: 43013523970000

WELL NAME: Adelman 5-9C4

OPERATOR: EP ENERGY E&P COMPANY, L.P. (N3850)

PHONE NUMBER: 713 997-5038

CONTACT: Maria S. Gomez

PROPOSED LOCATION: SENE 09 030S 040W

Permit Tech Review: ☒

SURFACE: 1900 FNL 0900 FEL

Engineering Review: ☒

BOTTOM: 1900 FNL 0900 FEL

Geology Review: ☒

COUNTY: DUCHESNE

LATITUDE: 40.23690

LONGITUDE: -110.33513

UTM SURF EASTINGS: 556557.00

NORTHINGS: 4454263.00

FIELD NAME: ALTAMONT

LEASE TYPE: 4 - Fee

LEASE NUMBER: Fee

PROPOSED PRODUCING FORMATION(S): GREEN RIVER(LWR)-WASATCH

SURFACE OWNER: 4 - Fee

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

- ☒ PLAT
- ☒ Bond: STATE/FEE - 400JU0708
- ☐ Potash
- ☐ Oil Shale 190-5
- ☐ Oil Shale 190-3
- ☐ Oil Shale 190-13
- ☒ Water Permit: Ballard City/Roosevelt City
- ☐ RDCC Review:
- ☒ Fee Surface Agreement
- ☐ Intent to Commingle
- Commingle Approved

LOCATION AND SITING:

- ☐ R649-2-3.
- Unit:
- ☐ R649-3-2. General
- ☐ R649-3-3. Exception
- ☒ Drilling Unit
- Board Cause No: Cause 139-90
- Effective Date: 5/9/2012
- Siting: (4) WELLS PER 640 ACRE
- ☐ R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 5 - Statement of Basis - bhill
8 - Cement to Surface -- 2 strings - hmadonald
12 - Cement Volume (3) - hmadonald

RECEIVED: October 22, 2013



GARY R. HERBERT
Governor

GREGORY S. BELL
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: Adelman 5-9C4
API Well Number: 43013523970000
Lease Number: Fee
Surface Owner: FEE (PRIVATE)
Approval Date: 10/22/2013

Issued to:

EP ENERGY E&P COMPANY, L.P., 1001 Louisiana, Houston, TX 77002

Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 139-90. The expected producing formation or pool is the GREEN RIVER(LWR)-WASATCH Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

Cement volumes for the 13 3/8" and 9 5/8" casing strings shall be determined from actual hole diameters in order to place cement from the pipe setting depths back to the surface.

Cement volume for the 7" intermediate string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to 2000' MD as indicated in the submitted drilling plan.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Additional Approvals:

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan - contact Dustin Doucet
- Significant plug back of the well - contact Dustin Doucet
- Plug and abandonment of the well - contact Dustin Doucet

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels
OR
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website
at <http://oilgas.ogm.utah.gov>
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing - contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program
- contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well - contact Dan Jarvis

Contact Information:

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office
801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office
801-231-8956 - after office hours

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

Approved By:

Approved By:

A handwritten signature in black ink, appearing to read "J. Rogers", written over a horizontal line.

For John Rogers
Associate Director, Oil & Gas

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: Fee
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY, L.P.		7. UNIT or CA AGREEMENT NAME:
3. ADDRESS OF OPERATOR: 1001 Louisiana, Houston, TX, 77002		8. WELL NAME and NUMBER: Adelman 5-9C4
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1900 FNL 0900 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENE Section: 09 Township: 03.0S Range: 04.0W Meridian: U		9. API NUMBER: 43013523970000
PHONE NUMBER: 713 997-5038 Ext		9. FIELD and POOL or WILDCAT: ALTAMONT
COUNTY: DUCHESNE		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 10/22/2014	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input checked="" type="checkbox"/> APD EXTENSION OTHER:
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.
 EP respectfully request a one year extension for future drilling of this well.

Approved by the
November 25, 2014
Oil, Gas and Mining

Date: _____

By:

NAME (PLEASE PRINT) Maria S. Gomez	PHONE NUMBER 713 997-5038	TITLE Principal Regulatory Analyst
SIGNATURE N/A	DATE 11/17/2014	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43013523970000

API: 43013523970000

Well Name: Adelman 5-9C4

Location: 1900 FNL 0900 FEL QTR SENE SEC 09 TWP 030S RNG 040W MER U

Company Permit Issued to: EP ENERGY E&P COMPANY, L.P.

Date Original Permit Issued: 10/22/2013

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? ☒ Yes ☐ No
- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? ☐ Yes ☒ No
- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? ☐ Yes ☒ No
- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? ☐ Yes ☒ No
- Has the approved source of water for drilling changed? ☐ Yes ☒ No
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? ☐ Yes ☒ No
- Is bonding still in place, which covers this proposed well? ☒ Yes ☐ No

Signature: Maria S. Gomez

Date: 11/17/2014

Title: Principal Regulatory Analyst Representing: EP ENERGY E&P COMPANY, L.P.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: Fee
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PHONE NUMBER: 713 997-5038 Ext		9. FIELD and POOL or WILDCAT: ALTAMONT
COUNTY: DUCHESNE		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 3/12/2015 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION </div> <div style="width: 33%;"> <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER </div> <div style="width: 33%;"> <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/> </div> </div>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. <div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> Changes to casing setting depths, MW, and cementing. Please see attached. </div> <div style="width: 35%; text-align: right;"> <p style="color: red; font-weight: bold;">Approved by the March 12, 2015 Oil, Gas and Mining</p> <p style="color: red; font-weight: bold;">Date: _____</p> <p style="color: red; font-weight: bold;">By: <u>Derek Duff</u></p> </div> </div>		
NAME (PLEASE PRINT) Maria S. Gomez	PHONE NUMBER 713 997-5038	TITLE Principal Regulatory Analyst
SIGNATURE N/A	DATE 3/12/2015	

**Adelman 5-9C4
Sec. 9, T3S, R4W
DUCHESNE COUNTY, UT**

EP ENERGY E&P COMPANY, L.P.

DRILLING PROGRAM

1. Estimated Tops of Important Geologic Markers

<u>Formation</u>	<u>Depth</u>
Green River (GRRV)	4,433' TVD
Green River (GRTN1)	5,333' TVD
Mahogany Bench	6,233' TVD
L. Green River	7,433' TVD
Wasatch	9,433' TVD
T.D. (Permit)	12,600' TVD

2. Estimated Depths of Anticipated Water, Oil, Gas or Mineral Formations:

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River (GRRV)	4,433' MD/TVD
	Green River (GRTN1)	5,333' MD/TVD
	Mahogany Bench	6,233' MD/TVD
Oil	L. Green River	7,433' MD/TVD
Oil	Wasatch	9,433' MD/TVD

3. Pressure Control Equipment: (Schematic Attached)

A Diverter Stack on structural pipe from 60' MD/TVD to 2,100' MD/TVD. A 10M BOP stack w/ rotating head, spacer spool, 5M annular, flex rams, blind rams & single w/ flex rams used from 2,100' MD/TVD to 9,500' MD/TVD. A 10M BOP stack w/ rotating head, spacer spool, 5M annular, flex rams, blind rams & single w/ flex rams from 9,500' MD/TVD to TD (12,600' MD/TVD).

The BOPE and related equipment will meet the requirements of the 5M and 10M system.

This well is in surrounded by many wells we have drilled this year. We have pre-set 9-5/8" to around this same depth on many wells with no issues. I have a great handle on MW's & what we should expect in this area.

There are 5 SWD wells within 4 miles of our location but none of them are within 2 miles. Below is the information for all 5 wells:

1. **The Belcher 2-33B4 SWD is 10,635' or 2.01 miles North, North West of the proposed location.** It is owned by EP Energy & it is a pretty new SWD well (it was converted to a SWD well in 9/2014). The injection interval is from 4,142'-6,230'. It has been injecting at an average of 4,200 bbls/day @ 626 psi. The shut in pressure is 283 psi. The EMW is 9.91 ppg. Since this SWD is North, North West of the proposed location (which means it is not on fracture orientation) & more than 2.0 miles away, I know we will not see any pressure from this well.
2. **The Lindsay Russell 2-32B4 SWD well is 11,982' or 2.27 miles North West of the proposed location.** The injection interval is @ 2464'-3726'. It has been injecting between 1600-2000 bbls/day @ 900 psi. We own this well & it is an active SWD well. When it goes down on maintenance or goes down, the pressure dissipates to 20 psi and stays at 20 psi. Using 20 psi, the EMW @ 2464' is 8.76 ppg. Since this SWD is North West of the proposed location (which means it is not on fracture orientation) & more than 2.0 miles away, I know we will not see any pressure from this well.
3. **The Blue Bench 1-13C5 SWD is 16,418' or 3.11 miles West, South West of our location.** It is owned by Intercept Energy & is an active SWD well. It is injecting into the Upper/Middle Green River & Upper-most Lower Green River. The injection interval is from 4106'-7528'. The injection rate is now ~500 bbls/day @ 500-600 psi (I just got off the phone with Keith who is with Intercept Energy). The pressure dissipates to 300 psi while down on maintenance. Using 300 psi, the EMW @ 4106' is 10.01 ppg. We will not see any pressure from this well since it is 3.11 miles away from the proposed location. We have drilled as close as 0.98 miles to this SWD well (that well is between the SWD & this proposed location) & on fracture orientation and have not seen any pressure while drilling.
4. **The IWM 3-30B4 SWD well is 16,499' or 3.12 miles North West of the proposed location.** The injection interval is @ 4063'-5130'. It has been injecting ~5,000 bbls/day @ 720 psi. IWM owns this well & it is an active SWD well. The shut in pressure is 321 psi. Using 321 psi, the EMW @ 4063' is 10.12 ppg. Since this SWD is North West of the proposed location (which means it is not on fracture orientation) & more than 3.0 miles away, I know we will not see any pressure from this well.
5. **The Rhoades Moon 1-36B5 SWD is 19,674' or 3.72 miles North West of the proposed location.** It is owned by EP Energy & is an active SWD well. It has been injecting since 2001. The injection interval is from 4114'-5055'. The injection rate averages 7200 bbls/day @ 900 psi (maximum allowable injection pressure is 1400 psi). When the well goes down for maintenance, the pressure dissipates to 600 psi. Using 600 psi, the EMW @ 4114' is 11.4 ppg (the weight of the fluid being injected is ~8.6 ppg). Since this SWD is North West of the proposed location (which means it is not on fracture orientation) & more than 3.5 miles away, I know we will not see any pressure from this well.

OPERATORS MINIMUM SPECIFICATIONS FOR BOPE:

The surface casing will be equipped with a flanged casing head of 5M psi working pressure. An 11" 5M x 11" 10M spool, 11" x 10M psi BOP and 5M psi annular will be nipped up on the surface casing and tested to 250 psi low test / 3,000 psi high test for 10 minutes each prior to drilling out. The surface casing will be tested to 1,000 psi. for 30 mins. Intermediate casing will be tested to the greater of 1,500 psi or 0.22 psi/ft. The choke manifold equipment, upper Kelly cock and floor safety valves will be tested to 5M psi. The annular preventer will be tested to 250 psi low test / 4,000 psi high test. The 10M BOP will be installed with rotating head, spacer spool, 5M annular, flex rams, blind rams & single w/ flex rams from surface shoe to TD. The BOPE will be hydraulically operated.

In addition, the BOP equipment will be tested after running intermediate casing, after any repairs to the equipment and at least once every 30 days. Pipe and blind rams will be activated on each trip, annular preventer will be activated weekly and weekly BOP drills will be held with each crew.

Statement on Accumulator System and Location of Hydraulic Controls:

Precision 406 is expected to be used to drill the proposed well. Operations will commence after approval of this application. Manual and/or hydraulic controls will be in compliance with 5M and 10M psi systems.

Auxiliary Equipment:

- A) Pason Gas Monitoring 2,100' - TD
- B) Mud logger with gas monitor – 2,100' to TD
- C) Choke manifold with one manual and one hydraulic operated choke
- D) Full opening floor valve with drill pipe thread
- E) Upper and lower Kelly cock
- F) Shaker, de-sander and centrifuge

4. Proposed Casing & Cementing Program:

Please refer to the attached Wellbore Diagram.

All casing will meet or exceed the following design safety factors:

- Burst = 1.00
- Collapse = 1.125
- Tension = 1.2 (including 100k# overpull)

Cement design calculations for intermediate and production hole will be based on minimum 10% excess over gauge hole volumes. Actual volumes pumped will be a minimum of 10% excess over caliper volume to designed tops of cement for any section logged. A minimum of 50% excess over gauge volume will be pumped on surface casing.

5. **Drilling Fluids Program:**

Proposed Mud Program:

Interval	Type	Mud Weight
Surface	Air	Air
Intermediate	WBM	9.4 – 10.6
Production	WBM	11.0 – 13.0

Anticipated mud weights are based on actual offset well bottom-hole pressure data. Mud weights utilized may be somewhat higher to allow for trip margin and to provide hole stability for running logs and casing.

Visual mud monitoring equipment will be utilized.

6. **Evaluation Program:**

Logs:

Mud Log: 2,100' MD/TVD – TD

Open Hole Logs: Gamma Ray, Neutron-Density, Resistivity, Sonic, from surface casing shoe to TD.

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 12,600' TVD equals approximately 8,518 psi. This is calculated based on a 0.676 psi/ft gradient (13.0 ppg mud density at TD).

Maximum anticipated surface pressure equals approximately 5,746 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/ft).

Maximum anticipated surface pressure based on frac gradient at 7" casing shoe is 0.8 psi/ft at 9,500' TVD = 7,600 psi

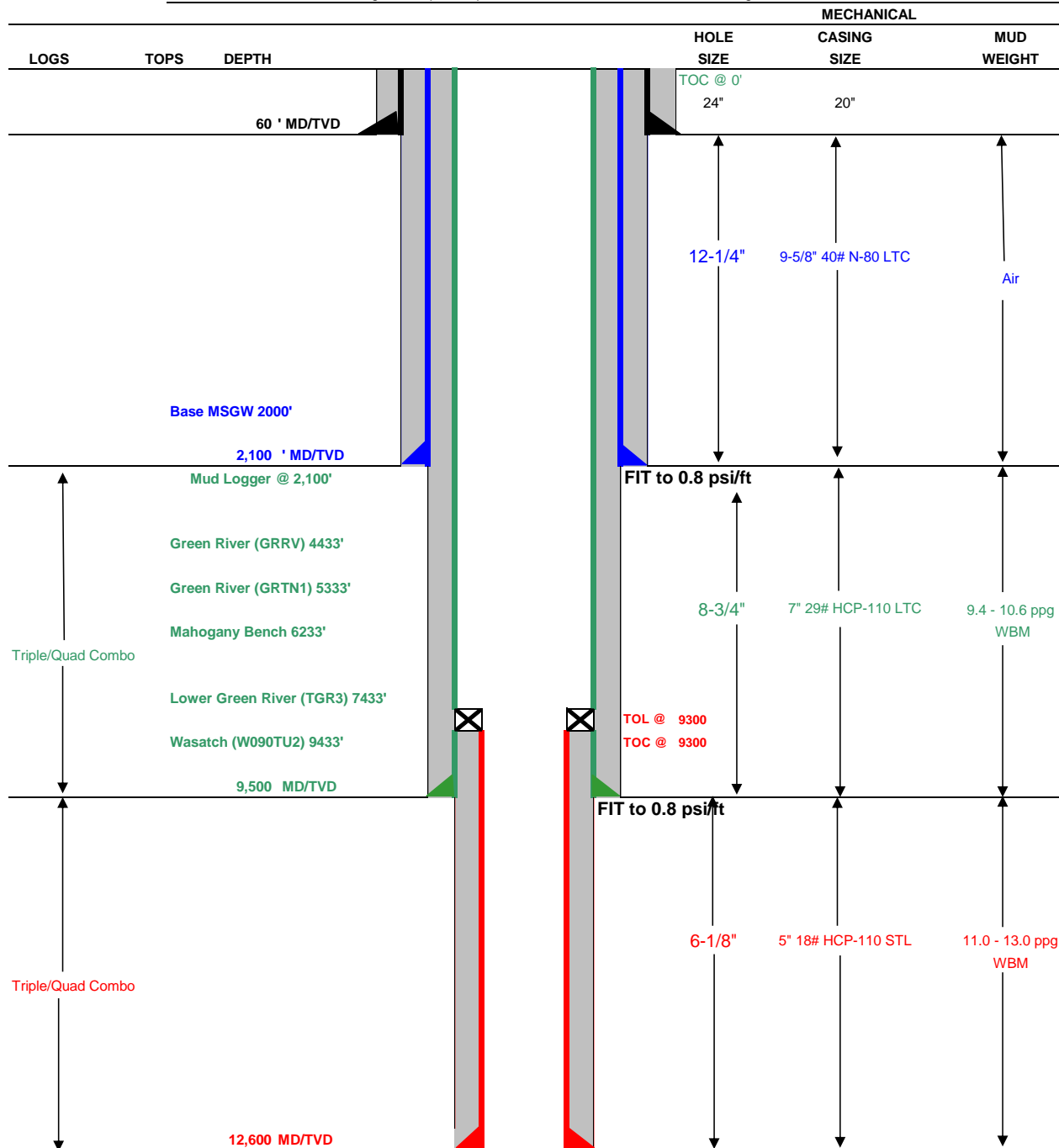
BOPE and casing design will be based on the lesser of the two MASPs which is 5,746 psi.

8. **OPERATOR REQUESTS THAT THE PROPOSED WELL BE PLACED ON CONFIDENTIAL STATUS.**



Drilling Schematic

Company Name: EP ENERGY	Date: March 2, 2015
Well Name: Adelman 5-9C4	TD: 12,600
Field, County, State: Altamont, Duchesne, Utah	AFE #: TBD
Surface Location: Sec 9 T3S R4W 1900' FNL 900' FEL	BHL: Straight Hole
Objective Zone(s): Green River, Wasatch	Elevation: 6015.9
Rig: Precision 406	Spud (est.): TBD
BOPE Info: Diverter Stack on structural pipe from 60' to 2,100' . 11 10M BOPE w/ rotating head & 5M annular from 2,100' to 9,500' . 11 10M BOPE w/ rotating head, spacer spool, 5M annular, flex rams, blind rams, single w/ flex rams from 9,500' to TD	



DRILLING PROGRAM

CASING PROGRAM	SIZE	INTERVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
SURFACE	9-5/8"	0	2100	40.00	N-80	LTC	5,750	3,090	737
INTERMEDIATE	7"	0	9500	29.00	HCP-110	LTC	11,220	9,750	797
PRODUCTION LINER	5"	9300	12600	18.00	HCP-110	STL	13,940	15,450	341

CEMENT PROGRAM		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	Lead	1,600	EXTENDACEM SYSTEM: Type V Cement + 2% Cal-Seal + 0.35% Versaset + 0.3% D-Air 5000 + 6% Salt + 2% Econolite + 0.125 Poly-E-Flake	446	100%	12.0 ppg	2.36
	Tail	500	HALCEM SYSTEM: Class G Cement + 3 lbm/sk Silicalite Compacted + 1% Salt + 0.3% Econolite + 0.25 lbm/sk Poly-E-Flake + 0.25 lbm/sk Kwik Seal + 0.3% D-AIR 5000	195	50%	14.3 ppg	1.30
INTERMEDIATE	Lead	7,000	EXTENDACEM SYSTEM: Class G Cement + 6% Bentonite + 0.2% Econolite + 0.3% Versaset + 0.75% HR-5 + 0.3% Super CBL + 0.2% Halad-322 + 0.125 lb/sk Poly-E-Flake	694	35%	12.5 ppg	1.91
	Tail	2,500	EXPANDACEM SYSTEM: Class G Cement + 4% Bentonite + 0.25 Poly-E-Flake + 0.1% Halad-413 + 5 lb/sk Silicalite Compacted + 0.15% SA-1015 + 0.3% HR-5	304	30%	13.0 ppg	1.64
PRODUCTION LINER		3,300	EXTENDACEM SYSTEM: Class G Cement + 0.2% Super CBL + 0.55% SCR-100 + 0.3% Halad-413 + 0.125 lbm/sk Poly-E-Flake + 3 lbm/sk Silicalite Compacted + 20% SS-200 + 0.10% SA-1015	196	30%	14.2 ppg	1.52

FLOAT EQUIPMENT & CENTRALIZERS	
SURFACE	PDC drillable float shoe, 1 joint casing, PDC drillable float collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing & every 3rd joint thereafter.
INTERMEDIATE	Halliburton's PDC drillable 10M P-110 float shoe, 1 joint, PDC drillable 10M P-110 float collar. Thread lock all float equipment. Maker joint at +/- 7,400'.
LINER	Float shoe, 1 joint, float collar, 1 joint, landing collar. Thread lock all FE. Maker joints every 1000'.

PROJECT ENGINEER(S): Brad MacAfee 713-997-6383

MANAGER: Bob Dodd

CONFIDENTIAL

Carol Daniels <caroldaniels@utah.gov>

SENSE 5-09 TOSS ROWW: FREE LEASE

24hr Notice of Spud

1 message

LANDRIG009 (Precision 406) <LANDRIG009@epenergy.com>

Tue, Mar 10, 2015 at 12:48 PM

To: "alexishuefner@utah.gov" <alexishuefner@utah.gov>, "MacAfee, Bradley D" <Brad.MacAfee@epenergy.com>, "caroldaniels@utah.gov" <caroldaniels@utah.gov>, "dennisingram@utah.gov" <dennisingram@utah.gov>, "Dodd, Robert W" <Robert.Dodd@epenergy.com>, "Mangum, Danny R (Contractor)" <danny.mangum@epenergy.com>, "Gomez, Maria S" <Maria.Gomez@epenergy.com>, "Derden, Roy Lynn (Contractor)" <Roy.Derden@epenergy.com>

RE: EP ENERGY

ADELMAN 5-9C4

API # 43013523970000

ALTAMONT FIELD

DUCHESNE COUNTY

Leon Ross Drilling spudded the well @ 11:26hrs on 3/10/2015. We plan on running and cementing 20" Conductor Casing to +/- 40' within 24hrs.

Regards,

Tony Wilkerson / Bill Owen

EP Energy LLC

PD Rig 406

Rig: 713-997-1220

Cell: 435-823-1764

THIS E-MAIL AND ANY MATERIALS TRANSMITTED WITH IT MAY CONTAIN CONFIDENTIAL OR PROPRIETARY MATERIAL FOR THE SOLE USE OF THE INTENDED RECIPIENT. ANY REVIEW, USE, DISTRIBUTION OR DISCLOSURE BY OTHERS IS STRICTLY PROHIBITED. IF YOU ARE NOT THE INTENDED RECIPIENT, OR AUTHORIZED TO RECEIVE THE INFORMATION FROM THE RECIPIENT, PLEASE NOTIFY THE SENDER BY REPLY E-MAIL AND DELETE ALL COPIES OF THIS MESSAGE.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: Fee
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY, L.P.		7. UNIT or CA AGREEMENT NAME:
3. ADDRESS OF OPERATOR: 1001 Louisiana, Houston, TX, 77002		8. WELL NAME and NUMBER: Adelman 5-9C4
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1900 FNL 0900 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENE Section: 09 Township: 03.0S Range: 04.0W Meridian: U		9. API NUMBER: 43013523970000
PHONE NUMBER: 713 997-5038 Ext		9. FIELD and POOL or WILDCAT: ALTAMONT
COUNTY: DUCHESNE		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 4/24/2015	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input type="text" value="Initial Completion"/>
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.
 EP plans to complete into the Wasatch. Please see attached for details.

Accepted by the
 Utah Division of
 Oil, Gas and Mining
FOR RECORD ONLY
 April 20, 2015

NAME (PLEASE PRINT) Maria S. Gomez	PHONE NUMBER 713 997-5038	TITLE Principal Regulatory Analyst
SIGNATURE N/A	DATE 4/20/2015	

Adelman 5-9C4**Initial Completion****API # : 43013523970000**

The following precautions will be taken until the RCA for the Conover is completed:

1. Review torque turning and running of the 7" and 5" liner of anomalies.
2. Test and chart casing for 30 minutes, noting pressure if any on surface casing.
3. Test all lubricators, valves and BOP's to working pressure.
4. A frac tree with BOP equipment will be utilized during the stimulation treatment.
5. Monitor the surface casing during frac:
 - a. Lay a flowline to the flow back tank and keep the valve open.
 - b. This line will remain in place until a wire line set retrievable packer is in place isolating the casing after the frac.
6. 2 7/8" tubing will be run to isolate the casing during the flow back of the well.
7. Well pressure and annulus pressure would be monitored during this time until the well is ready for pump.

Completion Information (Wasatch Formation)

Stage #1	RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~11688' – 12008' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~150000 # of THS 30/50. Total clean water volume is 3686 bbls.
Stage #2	RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~11355' – 11641' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~150000 # of THS 30/50. Total clean water volume is 3680 bbls.
Stage #3	RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~11035' – 11282' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~150000 # of THS 30/50. Total clean water volume is 3675 bbls.
Stage #4	RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~10776' – 11004' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~150000 # of THS 30/50. Total clean water volume is 3670 bbls.
Stage #5	RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~10493' – 10731' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~150000 # of TLC 30/50. Total clean water volume is 3665 bbls.

- Stage #6** RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~10235' – 10462' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~150000 # of TLC 30/50. Total clean water volume is 3660 bbls.
- Stage #7** RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~9930' – 10206' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~150000 # of TLC 30/50. Total clean water volume is 3655 bbls.
- Stage #8** RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~9634' – 9895' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~150000 # of TLC 30/50. Total clean water volume is 3650 bbls.

Stimulation Summary

	Top Perf	Btm. Perf	Gross Interval	Plug Depth	Net Perf Length	Total Shots	Perf Intervals	Type of Prop	Lbs of Prop	Lbs/ft	Lbs of 100 Mesh	Gals of HCL (15%)	BBLs of Clean H2O	BBLs of Slurry
Stage #1	11,688	12,008	320	NA	23	69	17	THS 30/50	150,000	469	3,000	5,000	3,686	4,098
Stage #2	11,355	11,641	286	11,656	23	69	17	THS 30/50	150,000	524	3,000	5,000	3,680	4,092
Stage #3	11,035	11,282	247	11,297	21	63	17	THS 30/50	150,000	607	3,000	5,000	3,675	4,087
Stage #4	10,776	11,004	228	11,019	23	69	17	THS 30/50	150,000	658	3,000	5,000	3,670	4,082
Stage #5	10,493	10,731	238	10,746	23	69	17	TLC 30/50	150,000	630	3,000	5,000	3,665	4,065
Stage #6	10,235	10,462	227	10,477	23	69	17	TLC 30/50	150,000	661	3,000	5,000	3,660	4,061
Stage #7	9,930	10,206	276	10,221	23	69	17	TLC 30/50	150,000	543	3,000	5,000	3,655	4,055
Stage #8	9,634	9,895	261	9,910	23	69	17	TLC 30/50	150,000	575	3,000	5,000	3,650	4,050
Average per Stage			260		23	68	17		150,000	583	3,000	5,000	3,668	4,074
Totals per Well			2,083		182	546	136		1,200,000		24,000	40,000	29,341	32,591

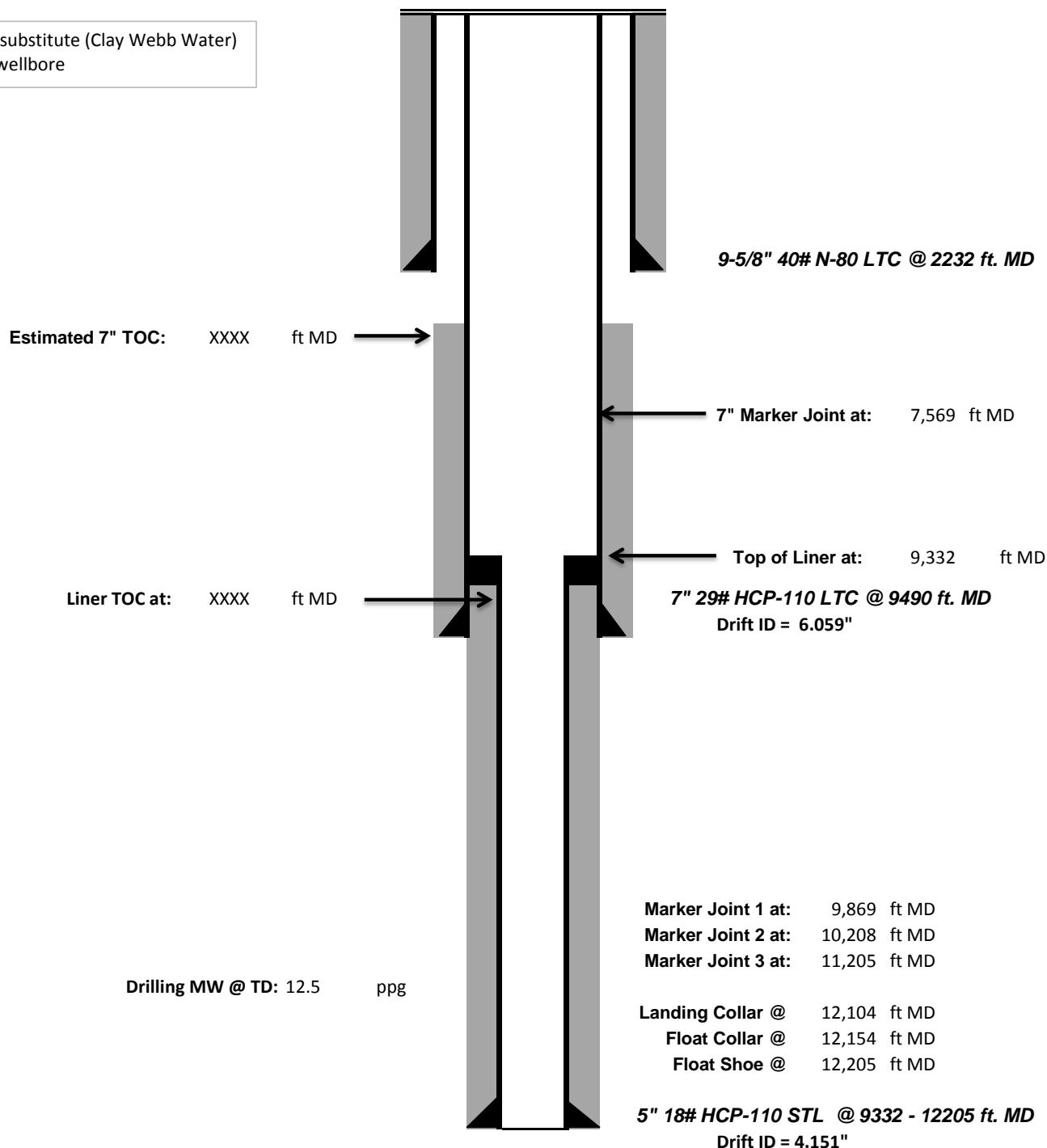


Pre-Completion Wellbore Schematic

Well Name: **Adelman 5-9C4**
 Company Name: **EP Energy**
 Field, County, State: **Altamont, Duchesne, UT**
 Surface Location: **Lat: 40 14' 12.985" N Long: 110 20' 06.349" W**
 Producing Zone(s): **Upper Wasatch**

Last Updated: **4/20/2015**
 By: **David Gregory**
 TD: **12,205**
 API: **43013523970000**
 AFE: **161310**

8.43 ppg KCL substitute (Clay Webb Water)
 water in the wellbore



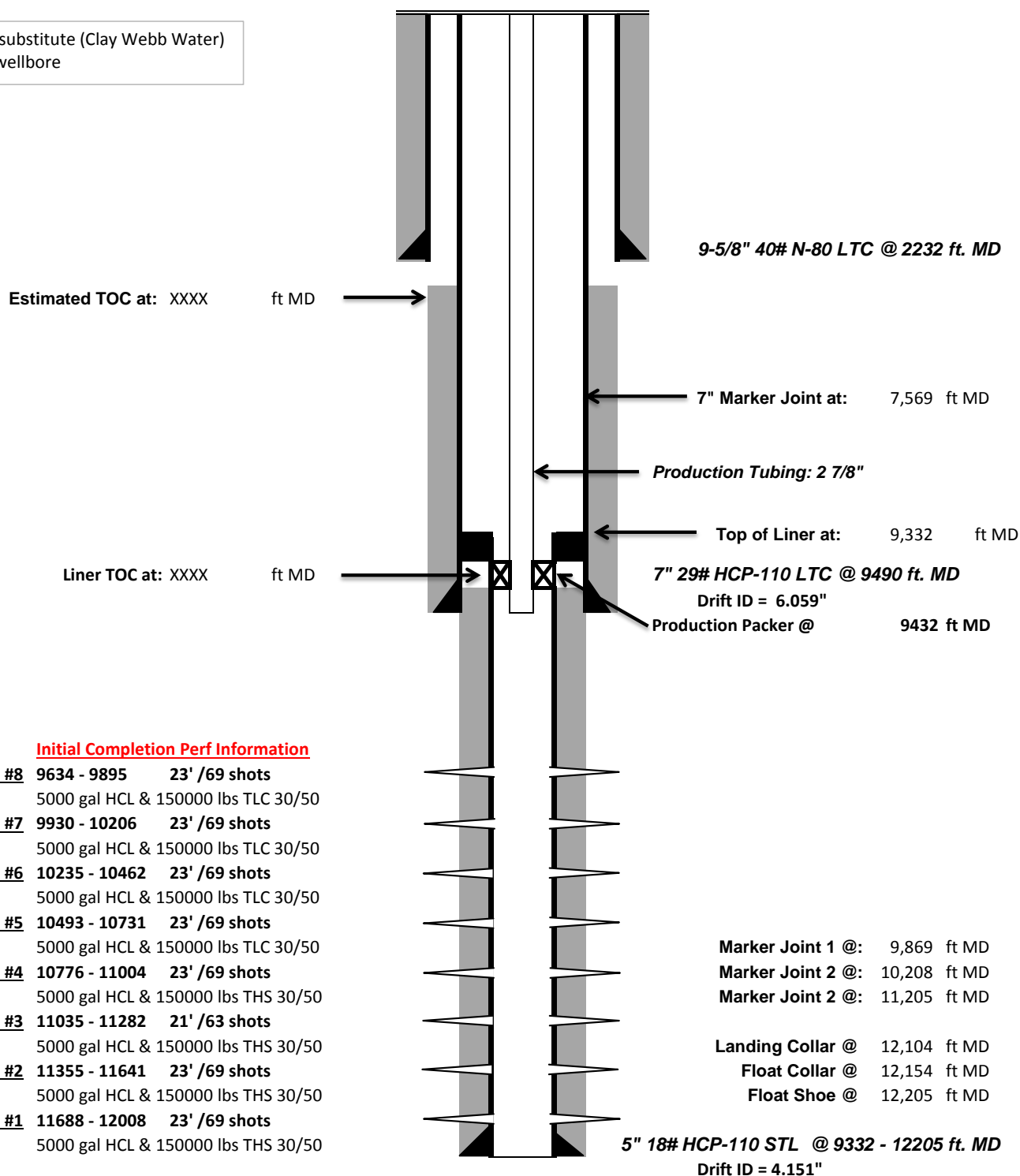


Post-Completion Wellbore Schematic

Well Name: **Adelman 5-9C4**
 Company Name: **EP Energy**
 Field, County, State: **Altamont, Duchesne, UT**
 Surface Location: **Lat: 40 14' 12.985" N Long: 110 20' 06.349" W**
 Producing Zone(s): **Upper Wasatch**

Last Updated: **4/20/2015**
 By: **David Gregory**
 TD: **12,205**
 API: **43013523970000**
 AFE: **161310**

8.43 ppg KCL substitute (Clay Webb Water)
 water in the wellbore



CONFIDENTIAL

Carol Daniels <caroldaniels@utah.gov>

SEN E 5-09 TO 3S ROY W FEE LEASE

24hr Notice Run & Cement Casing - Adelman 5-9C4 API # 43013523970000

1 message

LANDRIG009 (Precision 406) <LANDRIG009@epenergy.com>

Tue, Mar 17, 2015 at 6:23 AM

To: "alexishuefner@utah.gov" <alexishuefner@utah.gov>, "MacAfee, Bradley D" <Brad.MacAfee@epenergy.com>, "caroldaniels@utah.gov" <caroldaniels@utah.gov>, "dennisingram@utah.gov" <dennisingram@utah.gov>, "Dodd, Robert W" <Robert.Dodd@epenergy.com>, "Mangum, Danny R (Contractor)" <danny.mangum@epenergy.com>, "Gomez, Maria S" <Maria.Gomez@epenergy.com>, "Derden, Roy Lynn (Contractor)" <Roy.Derden@epenergy.com>

RE: EP ENERGY

ADELMAN 5-9C4

API # 43013523970000

ALTAMONT FIELD

DUCHESNE COUNTY

Leon Ross Drilling 26 moved in and commenced drilling the 12¼" surface hole @ 12:00hrs on 3/16/2015. We plan on running and cementing 9-5/8" Surface Casing to +/- 2,100' within 24hrs.

Regards,

Tony Wilkerson / Bill Owen

EP Energy LLC

PD Rig 406

Rig: 713-997-1220

Cell: 435-823-1764

THIS E-MAIL AND ANY MATERIALS TRANSMITTED WITH IT MAY CONTAIN CONFIDENTIAL OR PROPRIETARY MATERIAL FOR THE SOLE USE OF THE INTENDED RECIPIENT. ANY REVIEW, USE, DISTRIBUTION OR DISCLOSURE BY OTHERS IS STRICTLY PROHIBITED. IF YOU ARE NOT THE INTENDED RECIPIENT, OR AUTHORIZED TO RECEIVE THE INFORMATION FROM THE RECIPIENT, PLEASE NOTIFY THE SENDER BY REPLY E-MAIL AND DELETE ALL COPIES OF THIS MESSAGE.

CONFIDENTIAL

Carol Daniels <caroldaniels@utah.gov>

SENE S-09 TOSS ROYAL FEE LEASE

24hr Notice Run & Cement Casing

1 message

LANDRIG009 (Precision 406) <LANDRIG009@epenergy.com>

Fri, Apr 3, 2015 at 8:20 PM

To: "alexishuefner@utah.gov" <alexishuefner@utah.gov>, "MacAfee, Bradley D" <Brad.MacAfee@epenergy.com>, "caroldaniels@utah.gov" <caroldaniels@utah.gov>, "dennisingram@utah.gov" <dennisingram@utah.gov>, "Dodd, Robert W" <Robert.Dodd@epenergy.com>, "Mangum, Danny R (Contractor)" <danny.mangum@epenergy.com>, "Gomez, Maria S" <Maria.Gomez@epenergy.com>, "Derden, Roy Lynn (Contractor)" <Roy.Derden@epenergy.com>

RE: EP ENERGY

ADELMAN 5-9C4

API # 43013523970000

ALTAMONT FIELD

DUCHESNE COUNTY

We plan on running and cementing 7" 29# P-110HC LT&C Intermediate Casing to +/- 9,505' within 24hrs.

Regards,

Tony Wilkerson / Bill Owen

EP Energy LLC

PD Rig 406

Rig: 713-997-1220

Cell: 435-823-1764

THIS E-MAIL AND ANY MATERIALS TRANSMITTED WITH IT MAY CONTAIN CONFIDENTIAL OR PROPRIETARY MATERIAL FOR THE SOLE USE OF THE INTENDED RECIPIENT. ANY REVIEW, USE, DISTRIBUTION OR DISCLOSURE BY OTHERS IS STRICTLY PROHIBITED. IF YOU ARE NOT THE INTENDED RECIPIENT, OR AUTHORIZED TO RECEIVE THE INFORMATION FROM THE RECIPIENT, PLEASE NOTIFY THE SENDER BY REPLY E-MAIL AND DELETE ALL COPIES OF THIS MESSAGE.

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MININGAMENDED REPORT ☐ FORM 8
(highlight changes)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG						5. LEASE DESIGNATION AND SERIAL NUMBER:			
						6. IF INDIAN, ALLOTTEE OR TRIBE NAME			
1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER _____						7. UNIT or CA AGREEMENT NAME			
b. TYPE OF WORK: NEW WELL <input type="checkbox"/> HORIZ. LATS. <input type="checkbox"/> DEEP-EN <input type="checkbox"/> RE-ENTRY <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER _____						8. WELL NAME and NUMBER:			
2. NAME OF OPERATOR:						9. API NUMBER:			
3. ADDRESS OF OPERATOR: CITY _____ STATE _____ ZIP _____					PHONE NUMBER:	10 FIELD AND POOL, OR WILDCAT			
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: AT TOP PRODUCING INTERVAL REPORTED BELOW: AT TOTAL DEPTH:						11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:			
						12. COUNTY		13. STATE	
								UTAH	
14. DATE SPUDDED:		15. DATE T.D. REACHED:		16. DATE COMPLETED: ABANDONED <input type="checkbox"/> READY TO PRODUCE <input type="checkbox"/>		17. ELEVATIONS (DF, RKB, RT, GL):			
18. TOTAL DEPTH: MD _____ TVD _____		19. PLUG BACK T.D.: MD _____ TVD _____		20. IF MULTIPLE COMPLETIONS, HOW MANY? *		21. DEPTH BRIDGE MD _____ PLUG SET: TVD _____			
22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)				23. WAS WELL CORED? NO <input type="checkbox"/> YES <input type="checkbox"/> (Submit analysis) WAS DST RUN? NO <input type="checkbox"/> YES <input type="checkbox"/> (Submit report) DIRECTIONAL SURVEY? NO <input type="checkbox"/> YES <input type="checkbox"/> (Submit copy)					
24. CASING AND LINER RECORD (Report all strings set in well)									
HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
25. TUBING RECORD									
SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	
26. PRODUCING INTERVALS					27. PERFORATION RECORD				
FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS	
(A)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(B)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC. See attached for further information on #27 & #28.									
DEPTH INTERVAL		AMOUNT AND TYPE OF MATERIAL							
29. ENCLOSED ATTACHMENTS: All logs are submitted to UDOGM by vendor.								30. WELL STATUS:	
<input type="checkbox"/> ELECTRICAL/MECHANICAL LOGS				<input type="checkbox"/> GEOLOGIC REPORT		<input type="checkbox"/> DST REPORT		<input type="checkbox"/> DIRECTIONAL SURVEY	
<input type="checkbox"/> SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION				<input type="checkbox"/> CORE ANALYSIS		<input type="checkbox"/> OTHER: _____			

31. INITIAL PRODUCTION**INTERVAL A (As shown in item #26)**

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)**33. SUMMARY OF POROUS ZONES (Include Aquifers):**

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) _____ TITLE _____

SIGNATURE _____ DATE _____

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

Attachment to Well Completion Report**Form 8 Dated May 31, 2015****Well Name: Adelman 5-9C4****Items #27 and #28 Continued****27. Perforation Record**

Interval (Top/Bottom – MD)	Size	No. of Holes	Perf. Status
10483'-10677'	.40	120	Open
10224'-10452'	.40	69	Open
9917'-10195'	.40	69	Open
9619'-9882'	.40	69	Open

28. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
10769'-10998'	5000 gal acid, 3120# 100 mesh, 38520# 30/50 PRC
10483'-10677'	5000 gal acid, 6170# 100 mesh, 71620# 30/50 PRC
10224'-10452'	5000 gal acid, 3020# 100 mesh, 150500# 30/50 PRC
9917'-10195'	5000 gal acid, 2965# 100 mesh, 153300# 30/50 PRC
9619'-9882'	5000 gal acid, 2375# 100 mesh, 149490# 30/50 PRC



Company: EP Energy
Well: Adelman 5-9C4
Location: Duchesne, UT
Rig: Precision 406

Job Number: _____
Mag Decl.: _____
Dir Driller: _____
MWD Eng: _____

Calculation Method Minimum Curvature
Proposed Azimuth 0.00
Depth Reference KB
Tie Into: Gyro/MWD

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')	
							N/S (ft)	E/W (ft)	Distance (ft)	Direction Azimuth				
Tie In	0.00	0.00	0.00											
1	100.00	0.78	171.64	100.00	100.00	-0.68	0.68	S	0.10	E	0.68	171.64	0.78	171.64
2	200.00	0.46	151.05	100.00	199.99	-1.70	1.70	S	0.39	E	1.75	166.97	0.38	-20.58
3	300.00	0.40	183.62	100.00	299.99	-2.40	2.40	S	0.57	E	2.47	166.69	0.25	-0.07
4	400.00	0.56	183.15	100.00	399.98	-3.23	3.23	S	0.52	E	3.28	170.86	0.16	-0.47
5	500.00	0.42	190.84	100.00	499.98	-4.08	4.08	S	0.42	E	4.10	174.05	0.15	-0.14
6	600.00	0.30	215.38	100.00	599.98	-4.65	4.65	S	0.20	E	4.65	177.48	0.19	-0.12
7	700.00	0.33	232.51	100.00	699.98	-5.04	5.04	S	0.17	W	5.04	181.95	0.10	0.03
8	800.00	0.37	227.46	100.00	799.98	-5.43	5.43	S	0.63	W	5.46	186.66	0.05	0.04
9	900.00	0.15	182.62	100.00	899.97	-5.77	5.77	S	0.88	W	5.84	188.63	0.28	-0.22
10	1000.00	0.37	180.96	100.00	999.97	-6.23	6.23	S	0.89	W	6.29	188.11	0.22	0.22
11	1100.00	0.18	167.38	100.00	1099.97	-6.70	6.70	S	0.86	W	6.76	187.31	0.21	-0.20
12	1200.00	0.38	180.34	100.00	1199.97	-7.18	7.18	S	0.83	W	7.23	186.58	0.21	0.21
13	1300.00	0.40	222.96	100.00	1299.97	-7.77	7.77	S	1.07	W	7.85	187.84	0.29	0.02
14	1400.00	0.05	301.84	100.00	1399.97	-8.01	8.01	S	1.34	W	8.12	189.52	0.40	-0.36
15	1500.00	0.25	181.86	100.00	1499.97	-8.21	8.21	S	1.38	W	8.33	189.56	0.28	0.21
16	1600.00	0.07	224.37	100.00	1599.97	-8.48	8.48	S	1.44	W	8.60	189.61	0.21	-0.18
17	1700.00	0.42	102.58	100.00	1699.97	-8.61	8.61	S	1.12	W	8.68	187.42	0.47	0.35
18	1800.00	0.25	176.78	100.00	1799.96	-8.90	8.90	S	0.75	W	8.93	184.81	0.43	-0.18
19	1900.00	0.30	119.25	100.00	1899.96	-9.24	9.24	S	0.51	W	9.26	183.16	0.26	0.05
20	2000.00	0.26	123.73	100.00	1999.96	-9.49	9.49	S	0.10	W	9.49	180.60	0.04	-0.04
21	2119.00	0.35	178.52	119.00	2118.96	-10.01	10.01	S	0.13	E	10.01	179.24	0.25	0.08
22	2277.00	0.30	206.10	158.00	2276.96	-10.86	10.86	S	0.04	W	10.86	180.20	0.10	-0.03
23	2373.00	0.70	342.90	96.00	2372.96	-10.53	10.53	S	0.32	W	10.53	181.74	0.98	0.42
24	2469.00	1.70	23.80	96.00	2468.94	-8.67	8.67	S	0.08	E	8.67	179.46	1.31	1.04
25	2565.00	1.70	22.30	96.00	2564.89	-6.04	6.04	S	1.20	E	6.16	168.80	0.05	0.00
26	2661.00	1.50	29.80	96.00	2660.86	-3.64	3.64	S	2.36	E	4.34	147.00	0.30	-0.21
27	2757.00	1.30	11.50	96.00	2756.83	-1.48	1.48	S	3.20	E	3.53	114.79	0.51	-0.21
28	2853.00	1.30	22.30	96.00	2852.80	0.60	0.60	N	3.83	E	3.88	81.17	0.25	0.00
29	2949.00	1.00	25.50	96.00	2948.78	2.36	2.36	N	4.61	E	5.18	62.89	0.32	-0.31
30	3045.00	1.80	16.20	96.00	3044.75	4.56	4.56	N	5.39	E	7.06	49.74	0.86	0.83
31	3141.00	1.60	8.40	96.00	3140.71	7.34	7.34	N	6.01	E	9.48	39.30	0.32	-0.21
32	3237.00	1.20	14.50	96.00	3236.68	9.64	9.64	N	6.45	E	11.60	33.81	0.44	-0.42
33	3333.00	0.90	10.00	96.00	3332.67	11.35	11.35	N	6.84	E	13.25	31.06	0.32	-0.31
34	3429.00	1.80	356.20	96.00	3428.64	13.60	13.60	N	6.87	E	15.23	26.79	0.99	0.94
35	3526.00	1.30	332.20	97.00	3525.60	16.09	16.09	N	6.25	E	17.26	21.23	0.83	-0.52



Company: EP Energy
Well: Adelman 5-9C4
Location: Duchesne, UT
Rig: Precision 406

Job Number:
Mag Decl.:
Dir Driller:
MWD Eng:

Calculation Method Minimum Curvature
Proposed Azimuth 0.00
Depth Reference KB
Tie Into: Gyro/MWD

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates				Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)		E/W (ft)		Distance (ft)	Direction Azimuth			
36	3622.00	1.00	326.30	96.00	3621.59	17.75	17.75	N	5.28	E	18.52	16.56	0.34	-0.31	-6.15
37	3718.00	1.50	353.30	96.00	3717.56	19.70	19.70	N	4.67	E	20.24	13.33	0.79	0.52	28.13
38	3814.00	1.10	349.10	96.00	3813.54	21.85	21.85	N	4.35	E	22.28	11.25	0.43	-0.42	-4.37
39	3911.00	2.10	358.00	97.00	3910.50	24.54	24.54	N	4.11	E	24.88	9.51	1.06	1.03	9.18
40	4007.00	1.80	347.60	96.00	4006.44	27.77	27.77	N	3.72	E	28.02	7.64	0.48	-0.31	-10.83
41	4104.00	1.70	342.00	97.00	4103.40	30.63	30.63	N	2.95	E	30.77	5.51	0.20	-0.10	-5.77
42	4200.00	1.30	331.30	96.00	4199.37	32.94	32.94	N	1.99	E	33.00	3.46	0.51	-0.42	-11.15
43	4296.00	0.70	302.60	96.00	4295.35	34.21	34.21	N	0.97	E	34.22	1.63	0.80	-0.63	-29.90
44	4392.00	1.40	320.80	96.00	4391.33	35.43	35.43	N	0.26	W	35.43	359.58	0.80	0.73	18.96
45	4489.00	0.90	287.30	97.00	4488.32	36.58	36.58	N	1.74	W	36.62	357.28	0.84	-0.52	-34.54
46	4585.00	1.50	331.10	96.00	4584.30	37.90	37.90	N	3.07	W	38.03	355.37	1.10	0.63	45.63
47	4681.00	1.10	308.20	96.00	4680.27	39.57	39.57	N	4.40	W	39.82	353.66	0.68	-0.42	-23.85
48	4775.00	1.60	327.20	94.00	4774.25	41.23	41.23	N	5.82	W	41.64	351.97	0.71	0.53	20.21
49	4871.00	1.10	292.50	96.00	4870.22	42.71	42.71	N	7.39	W	43.35	350.18	0.97	-0.52	-36.15
50	4967.00	1.20	306.70	96.00	4966.20	43.67	43.67	N	9.05	W	44.59	348.29	0.31	0.10	14.79
51	5063.00	1.70	323.10	96.00	5062.17	45.40	45.40	N	10.71	W	46.65	346.72	0.67	0.52	17.08
52	5159.00	0.90	316.20	96.00	5158.15	47.09	47.09	N	12.09	W	48.61	345.60	0.85	-0.83	-7.19
53	5255.00	0.80	270.40	96.00	5254.14	47.64	47.64	N	13.28	W	49.45	344.42	0.70	-0.10	-47.71
54	5350.00	0.90	266.30	95.00	5349.13	47.59	47.59	N	14.69	W	49.81	342.85	0.12	0.11	-4.32
55	5446.00	1.20	227.80	96.00	5445.11	46.87	46.87	N	16.19	W	49.59	340.95	0.78	0.31	-40.10
56	5543.00	1.30	228.10	97.00	5542.09	45.45	45.45	N	17.76	W	48.80	338.66	0.10	0.10	0.31
57	5639.00	1.40	222.00	96.00	5638.06	43.85	43.85	N	19.35	W	47.93	336.19	0.18	0.10	-6.35
58	5735.00	1.30	204.50	96.00	5734.03	41.99	41.99	N	20.59	W	46.77	333.88	0.44	-0.10	-18.23
59	5831.00	1.30	204.90	96.00	5830.01	40.01	40.01	N	21.50	W	45.42	331.75	0.01	0.00	0.42
60	5928.00	1.60	196.20	97.00	5926.98	37.71	37.71	N	22.34	W	43.83	329.36	0.38	0.31	-8.97
61	6024.00	1.30	196.30	96.00	6022.95	35.38	35.38	N	23.02	W	42.21	326.95	0.31	-0.31	0.10
62	6119.00	1.10	204.10	95.00	6117.93	33.51	33.51	N	23.70	W	41.05	324.74	0.27	-0.21	8.21
63	6215.00	1.20	184.70	96.00	6213.91	31.67	31.67	N	24.15	W	39.83	322.67	0.42	0.10	-20.21
64	6310.00	1.60	172.30	95.00	6308.88	29.37	29.37	N	24.06	W	37.96	320.67	0.53	0.42	-13.05
65	6407.00	1.60	179.10	97.00	6405.84	26.67	26.67	N	23.86	W	35.78	318.19	0.20	0.00	7.01
66	6503.00	1.70	178.20	96.00	6501.80	23.91	23.91	N	23.79	W	33.73	315.14	0.11	0.10	-0.94
67	6599.00	1.90	176.40	96.00	6597.75	20.89	20.89	N	23.64	W	31.55	311.47	0.22	0.21	-1.87
68	6695.00	1.90	180.70	96.00	6693.70	17.72	17.72	N	23.56	W	29.48	306.93	0.15	0.00	4.48
69	6792.00	2.10	186.80	97.00	6790.64	14.34	14.34	N	23.79	W	27.78	301.08	0.30	0.21	6.29
70	6887.00	2.10	189.20	95.00	6885.58	10.90	10.90	N	24.28	W	26.61	294.17	0.09	0.00	2.53
71	6984.00	2.20	183.90	97.00	6982.51	7.28	7.28	N	24.69	W	25.74	286.44	0.23	0.10	-5.46
72	7080.00	2.50	184.20	96.00	7078.43	3.36	3.36	N	24.97	W	25.19	277.66	0.31	0.31	0.31



Company: EP Energy
Well: Adelman 5-9C4
Location: Duchesne, UT
Rig: Precision 406

Job Number: _____
Mag Decl.: _____
Dir Driller: _____
MWD Eng: _____

Calculation Method Minimum Curvature
Proposed Azimuth 0.00
Depth Reference KB
Tie Into: Gyro/MWD

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Direction Azimuth			
73	7176.00	2.40	184.80	96.00	7174.34	-0.73	0.73	S 25.29	W 25.30	268.34	0.11	-0.10	0.63
74	7272.00	2.50	190.20	96.00	7270.25	-4.80	4.80	S 25.83	W 26.27	259.48	0.26	0.10	5.62
75	7368.00	2.60	192.30	96.00	7366.16	-8.99	8.99	S 26.66	W 28.14	251.38	0.14	0.10	2.19
76	7464.00	2.80	189.00	96.00	7462.05	-13.43	13.43	S 27.49	W 30.60	243.97	0.26	0.21	-3.44
77	7560.00	2.90	194.00	96.00	7557.93	-18.10	18.10	S 28.45	W 33.72	237.53	0.28	0.10	5.21
78	7656.00	2.80	192.50	96.00	7653.82	-22.75	22.75	S 29.54	W 37.29	232.41	0.13	-0.10	-1.56
79	7752.00	2.80	192.30	96.00	7749.70	-27.33	27.33	S 30.55	W 40.99	228.19	0.01	0.00	-0.21
80	7849.00	2.70	194.80	97.00	7846.59	-31.85	31.85	S 31.64	W 44.89	224.81	0.16	-0.10	2.58
81	7943.00	3.00	198.10	94.00	7940.47	-36.33	36.33	S 32.97	W 49.06	222.22	0.36	0.32	3.51
82	8039.00	3.00	198.30	96.00	8036.34	-41.10	41.10	S 34.54	W 53.69	220.04	0.01	0.00	0.21
83	8136.00	3.20	195.50	97.00	8133.20	-46.12	46.12	S 36.06	W 58.54	218.02	0.26	0.21	-2.89
84	8232.00	3.20	189.50	96.00	8229.05	-51.35	51.35	S 37.22	W 63.41	215.94	0.35	0.00	-6.25
85	8328.00	3.50	189.60	96.00	8324.89	-56.88	56.88	S 38.15	W 68.49	213.85	0.31	0.31	0.10
86	8424.00	3.50	190.50	96.00	8420.71	-62.65	62.65	S 39.17	W 73.89	212.02	0.06	0.00	0.94
87	8520.00	3.50	189.60	96.00	8516.53	-68.42	68.42	S 40.19	W 79.35	210.43	0.06	0.00	-0.94
88	8616.00	3.70	187.10	96.00	8612.34	-74.38	74.38	S 41.06	W 84.96	208.90	0.26	0.21	-2.60
89	8712.00	3.70	187.00	96.00	8708.14	-80.53	80.53	S 41.82	W 90.74	207.45	0.01	0.00	-0.10
90	8809.00	3.90	184.60	97.00	8804.92	-86.92	86.92	S 42.47	W 96.74	206.04	0.26	0.21	-2.47
91	8905.00	3.30	203.50	96.00	8900.74	-92.71	92.71	S 43.83	W 102.55	205.30	1.38	-0.63	19.69
92	9002.00	3.60	199.50	97.00	8997.56	-98.14	98.14	S 45.96	W 108.37	205.10	0.40	0.31	-4.12
93	9098.00	3.30	196.50	96.00	9093.39	-103.63	103.63	S 47.75	W 114.11	204.74	0.36	-0.31	-3.13
94	9194.00	2.30	196.60	96.00	9189.27	-108.13	108.13	S 49.09	W 118.75	204.42	1.04	-1.04	0.10
95	9290.00	1.10	204.60	96.00	9285.23	-110.81	110.81	S 50.02	W 121.58	204.30	1.27	-1.25	8.33
96	9386.00	0.20	316.90	96.00	9381.22	-111.53	111.53	S 50.52	W 122.44	204.37	1.24	-0.94	116.98
97	9464.00	0.60	180.20	78.00	9459.22	-111.84	111.84	S 50.62	W 122.76	204.35	0.97	0.51	-175.26
98	9500.00	0.40	208.46	36.00	9495.22	-112.14	112.14	S 50.68	W 123.06	204.32	0.86	-0.55	78.49
99	9600.00	1.02	201.95	100.00	9595.21	-113.27	113.27	S 51.18	W 124.30	204.31	0.63	0.62	-6.50
100	9700.00	1.18	188.54	100.00	9695.19	-115.12	115.12	S 51.66	W 126.18	204.17	0.30	0.16	-13.41
101	9800.00	1.93	190.67	100.00	9795.16	-117.79	117.79	S 52.13	W 128.81	203.87	0.75	0.75	2.13
102	9900.00	1.98	182.33	100.00	9895.10	-121.17	121.17	S 52.51	W 132.06	203.43	0.29	0.06	-8.35
103	10000.00	2.09	188.50	100.00	9995.04	-124.70	124.70	S 52.85	W 135.43	202.97	0.24	0.10	6.18
104	10100.00	2.14	185.55	100.00	10094.97	-128.35	128.35	S 53.30	W 138.98	202.55	0.12	0.05	-2.96
105	10200.00	2.09	189.70	100.00	10194.90	-132.01	132.01	S 53.79	W 142.55	202.17	0.16	-0.04	4.16
106	10300.00	2.12	185.75	100.00	10294.83	-135.65	135.65	S 54.28	W 146.10	201.81	0.15	0.02	-3.95
107	10400.00	2.45	191.18	100.00	10394.75	-139.58	139.58	S 54.88	W 149.98	201.46	0.40	0.34	5.43
108	10500.00	2.58	186.58	100.00	10494.66	-143.91	143.91	S 55.55	W 154.26	201.11	0.24	0.12	-4.60
109	10600.00	2.45	188.71	100.00	10594.56	-148.26	148.26	S 56.13	W 158.53	200.74	0.16	-0.13	2.13



Company: EP Energy
Well: Adelman 5-9C4
Location: Duchesne, UT
Rig: Precision 406

Job Number: _____
Mag Decl.: _____
Dir Driller: _____
MWD Eng: _____

Calculation Method Minimum Curvature
Proposed Azimuth 0.00
Depth Reference KB
Tie Into: Gyro/MWD

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates			Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')	
							N/S (ft)	E/W (ft)		Distance (ft)	Direction Azimuth				
110	10700.00	2.42	185.19	100.00	10694.47	-152.47	152.47	S	56.65	W	162.65	200.38	0.15	-0.04	-3.52
111	10800.00	2.47	189.50	100.00	10794.38	-156.69	156.69	S	57.19	W	166.80	200.05	0.19	0.05	4.31
112	10900.00	2.80	191.81	100.00	10894.27	-161.21	161.21	S	58.05	W	171.34	199.80	0.35	0.33	2.31
113	11000.00	2.47	182.30	100.00	10994.17	-165.75	165.75	S	58.63	W	175.81	199.48	0.55	-0.33	-9.51
114	11100.00	2.71	182.13	100.00	11094.07	-170.26	170.26	S	58.81	W	180.13	199.06	0.24	0.24	-0.17
115	11200.00	2.24	181.66	100.00	11193.97	-174.58	174.58	S	58.95	W	184.26	198.66	0.47	-0.47	-0.47
116	11300.00	2.74	180.46	100.00	11293.88	-178.92	178.92	S	59.03	W	188.41	198.26	0.50	0.50	-1.19
117	11400.00	2.83	177.31	100.00	11393.76	-183.78	183.78	S	58.93	W	193.00	197.78	0.18	0.09	-3.15
118	11500.00	2.84	178.18	100.00	11493.64	-188.72	188.72	S	58.74	W	197.65	197.29	0.04	0.01	0.86
119	11600.00	2.85	180.36	100.00	11593.51	-193.68	193.68	S	58.68	W	202.37	196.85	0.11	0.00	2.19
120	11700.00	3.08	176.47	100.00	11693.38	-198.85	198.85	S	58.53	W	207.28	196.40	0.31	0.24	-3.89
121	11800.00	3.23	180.61	100.00	11793.23	-204.35	204.35	S	58.39	W	212.53	195.95	0.27	0.15	4.14
122	11900.00	2.98	176.46	100.00	11893.08	-209.76	209.76	S	58.26	W	217.70	195.52	0.34	-0.25	-4.15
123	12000.00	3.02	178.11	100.00	11992.94	-214.98	214.98	S	58.01	W	222.67	195.10	0.09	0.04	1.65
124	12057.00	3.04	179.80	57.00	12049.86	-217.99	217.99	S	57.96	W	225.56	194.89	0.16	0.04	2.97
125	12205.00	3.04	179.80	148.00	12197.66	-225.84	225.84	S	57.93	W	233.15	194.39	0.00	0.00	0.00

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: Fee
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY, L.P.		7. UNIT or CA AGREEMENT NAME:
3. ADDRESS OF OPERATOR: 1001 Louisiana, Houston, TX, 77002		8. WELL NAME and NUMBER: Adelman 5-9C4
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1900 FNL 0900 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENE Section: 09 Township: 03.0S Range: 04.0W Meridian: U		9. API NUMBER: 43013523970000
PHONE NUMBER: 713 997-5138 Ext		9. FIELD and POOL or WILDCAT: ALTAMONT
COUNTY: DUCHESNE		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 8/15/2016	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input checked="" type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.
 Please see attached proposed recompletion procedure along with current and post WBD's.

Approved by the
August 11, 2016
Oil, Gas and Mining

Date: _____

By: Derek Duff

NAME (PLEASE PRINT) Linda Renken	PHONE NUMBER 713 997-5138	TITLE Sr. Regulatory Analyst
SIGNATURE N/A	DATE 8/11/2016	

Adelman 5-9 C4 Recom Summary Procedure

- POOH with rods, pump & tubing. Inspect/Repair/Re-furbish as needed. Replace any bad tubing and joints of rods.
- Set 15K CBP for 5" 18# casing @ 9,600'. Dump bail 15' CMT on plug.
- Stage 1:
 - Perforate new UW interval from **9,345' - 9,540'**.
 - Prop Frac Perforations with **110,000** lbs 30/50 prop (w/ **8,000** lbs 100 mesh & **8,000** gals 15% HCl acid) (Stage 1 Recom).
- Stage 2:
 - RIH with 7" CBP & set @ 9,315'.
 - Perforate new LGR interval from **9,270' - 9,314'**.
 - Acidize perforations with w/ **7,000** gals 15% HCl acid (Stage 2 Recom).
- Stage 3:
 - RIH w/ 7" CBP & set @ 9,067'.
 - Perforate new LGR interval from **8,910' - 9,052'**.
 - Acidize perforations with w/ **16,000** gals 15% HCl acid (Stage 3 Recom).
- Stage 4:
 - RIH w/ 7" CBP & set @ 8,623'.
 - Perforate new LGR interval from **8,450' - 8,608'**.
 - Prop Frac Perforations with **100,000** lbs 30/50 prop (w/ **8,000** lbs 100 mesh & **8,000** gals 15% HCl acid) (Stage 4 Recom).
- Clean out well drilling up (3) 7" CBPs leaving 15' cmt on top of 5" CBP @ 9,600'. Top perf BELOW plug @ 9,619'.
- RIH w/ production tubing and rods.
- Clean location and resume production.



Proposed Pumping Wellbore Schematic

Well Name: **Adelman 5-9C4**
 Company Name: **EP Energy**
 Field, County, State: **Altamont, Duchesne, UT**
 Surface Location: **Lat: 40 14' 12.985" N Long: 110 20' 06.349" W**
 Producing Zone(s): **Upper Wasatch**

Last Updated: **6/9/2015**
 By: **Tomova**
 TD: **12,205**
 API: **43013523970000**
 AFE:

8.43 ppg KCL substitute (Clay Webb Water) water in the wellbore

296 jts 2-7/8" 6.5# L-80 8rd Tubing

9-5/8" 40# N-80 LTC @ 2232 ft. MD

Estimated TOC at: 3956 ft MD

ROD DETAIL

1-1/2" x 40' Polished Rod
59 (1,475') - 1" EL Rods - slick
40 (1,000') - 1" EL Rods w/ 4 gpr
104 (3,225') - 7/8" EL Rods w/ 4 gpr
117 (2,925') - 3/4" EL Rods w/ 4 gpr
18 (450') - 1 1/2" Sinker "K" Bars
2-1/2" x 1-3/4" x 38' 2stg HVR Insert Pump

Tubing Anchor @ 9,075'
4 jts 2-7/8" 6.5# L-80 8rd Tubing
Seating Nipple @ 9,200'
2' x 2 7/8" Tubing Sub
5 1/2" x 33' PBGA
2 jts 2-7/8" Mud Anchor
5 3/4" No-Go Nipple
EOT @ 9,300'

Liner TOC at: 9332 ft MD

Top of Liner at: 9,322 ft MD

7" 29# HCP-110 LTC @ 9490 ft. MD
 Drift ID = 6.059"

Initial Completion Perf Information

Stage #8 9619 - 9882 23' /69 shots
 5000 gal HCL & 150000 lbs TLC 30/50
Stage #7 9917 - 10195 23' /69 shots
 5000 gal HCL & 150000 lbs TLC 30/50
Stage #6 10224 - 10452 23' /69 shots
 5000 gal HCL & 150000 lbs TLC 30/50
Stage #5 10483 - 10724 23' /69 shots
 5000 gal HCL & 150000 lbs TLC 30/50
Stage #4 10769 - 10998 23' /69 shots
 5000 gal HCL & 150000 lbs THS 30/50
Stage #3 11029 - 11278 21' /63 shots
 5000 gal HCL & 150000 lbs THS 30/50
Stage #2 11351 - 11639 23' /69 shots
 5000 gal HCL & 150000 lbs THS 30/50
Stage #1 11686 - 12008 23' /69 shots
 5000 gal HCL & 150000 lbs THS 30/50

Marker Joint 1 @: 9,852 ft MD
Marker Joint 2 @: 10,192 ft MD
Marker Joint 2 @: 11,194 ft MD

Landing Collar @ 12,104 ft MD
Float Collar @ 12,154 ft MD
Float Shoe @ 12,205 ft MD

5" 18# HCP-110 STL @ 9322 - 12205 ft. MD
 Drift ID = 4.151"

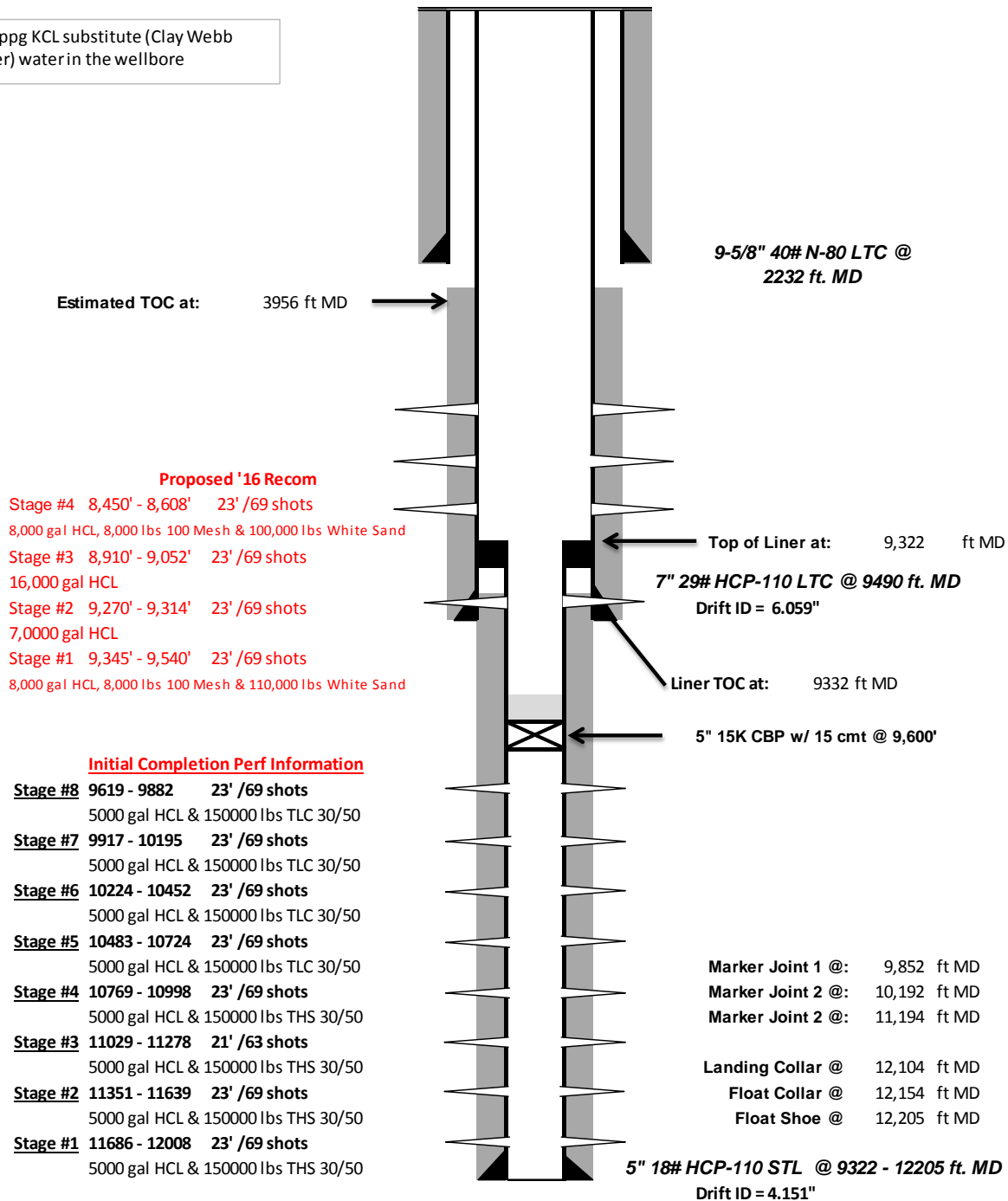


Proposed Pumping Wellbore Schematic

Well Name: **Adelman 5-9C4**
 Company Name: **EP Energy**
 Field, County, State: **Altamont, Duchesne, UT**
 Surface Location: **Lat: 40 14' 12.985" N Long: 110 20' 06.349" W**
 Producing Zone(s): **Upper Wasatch**

Last Updated: **8/7/2016**
 By: **Fondren**
 PBD: **12,104'**
 API: **43013523970000**
 AFE:

8.43 ppg KCL substitute (Clay Webb Water) in the wellbore



STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

RECOMPLETION

AMENDED REPORT ☐
(highlight changes)

FORM 8

5. LEASE DESIGNATION AND SERIAL NUMBER:

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT or CA AGREEMENT NAME

8. WELL NAME and NUMBER:

9. API NUMBER:

10 FIELD AND POOL, OR WILDCAT

11. QTR/QTR, SECTION, TOWNSHIP, RANGE,
MERIDIAN:

U.S.B. & M.

12. COUNTY

13. STATE

UTAH

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☐ OTHER _____b. TYPE OF WORK: NEW WELL ☐ HORIZ. LATS. ☐ DEEP-EN ☐ RE-ENTRY ☐ DIFF. RESVR. ☐ OTHER _____

2. NAME OF OPERATOR:

3. ADDRESS OF OPERATOR:

CITY

STATE

ZIP

PHONE NUMBER:

4. LOCATION OF WELL (FOOTAGES)

AT SURFACE:

AT TOP PRODUCING INTERVAL REPORTED BELOW:

AT TOTAL DEPTH:

14. DATE SPUDDED:

15. DATE T.D. REACHED:

16. DATE COMPLETED:

ABANDONED ☐READY TO PRODUCE ☐

17. ELEVATIONS (DF, RKB, RT, GL):

18. TOTAL DEPTH: MD

TVD

19. PLUG BACK T.D.: MD

TVD

20. IF MULTIPLE COMPLETIONS, HOW MANY? *

21. DEPTH BRIDGE MD

PLUG SET:

TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)

23.

WAS WELL CORED?

NO ☐YES ☐

(Submit analysis)

WAS DST RUN?

NO ☐YES ☐

(Submit report)

DIRECTIONAL SURVEY?

NO ☐YES ☐

(Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A)				
(B)				
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL

29. ENCLOSED ATTACHMENTS:

☐ ELECTRICAL/MECHANICAL LOGS ☐ GEOLOGIC REPORT ☐ DST REPORT ☐ DIRECTIONAL SURVEY
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION ☐ CORE ANALYSIS ☐ OTHER: _____

30. WELL STATUS:

31. INITIAL PRODUCTION**INTERVAL A (As shown in item #26)**

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)**33. SUMMARY OF POROUS ZONES (Include Aquifers):**

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) _____ TITLE _____

SIGNATURE _____ DATE _____

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

Attachment to Well Completion Report

Form 8 Dated: _

Well Name: _

Items #27 and #28 Continued

27. Perforation Record

Interval (Top/Bottom-MD)	Hole Size	No. of Holes	Perf. Status

28. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material

CENTRAL DIVISION

ALTAMONT FIELD
ADELMAN 5-9C4
ADELMAN 5-9C4
RECOMPLETE LAND

Operation Summary Report

Disclaimer: Although the information contained in this report is based on sound engineering practices, the copyright owner(s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

1 General

1.1 Customer Information

Company	CENTRAL DIVISION
Representative	
Address	

1.2 Well Information

Well	ADELMAN 5-9C4		
Project	ALTAMONT FIELD	Site	ADELMAN 5-9C4
Rig Name/No.		Event	RECOMPLETE LAND
Start date	8/19/2016	End date	9/6/2016
Spud Date/Time	3/31/2015	UWI	ADELMAN 5-9C4
Active datum	KB @6,032.9ft (above Mean Sea Level)		
Afe No./Description	167100/57223 / ADELMAN 5-9C4		

2 Summary

2.1 Operation Summary

Date	Time Start-End		Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (ft)	Operation
8/20/2016	6:00	7:00	1.00	WOR	28		P		CREW TRAVEL TO LOCATION HSM WRITE AND REVIEW JSA TOPIC; RIG OPERATIONS
	7:00	9:30	2.50	MIRU	01		P		ROAD RIG FROM HOGGE 3-16C4 TO LOCATION...SLIDE UNIT PUMP 60 BBLS OF HOT 2% KCL WATER DOWN ANNULAS MIRU
	9:30	10:30	1.00	WOR	39		P		L/D POLISH ROD UNSEAT PUMP FLUSH TBG w 60 BBLS OF HOT 2% KCL WATER
	10:30	13:00	2.50	WOR	39		P		TOH w L/D 2-1" RODS 125-1" 101-7/8" RODS L/D 19-3/4" ROD 98-3/4" RODS L/D 18-CBARS L/D PUMP
	13:00	15:20	2.33	WOR	16		P		N/D WELL HEAD N/D AND TEST 5K BOPE
	15:20	17:00	1.67	WOR	53		P		RELEASE 7" TAC AT 9066' SECURE WELL CLOSE BOPE AND LOCK BARRIER1 INSTALL TIW VALVE w NIGHT CAP BARRIER 1 & 2 CLOSE 7" CSG VALVE AND NIGHT CAP BARRIER 1 & 2 OPEN TO SALES SDFN
8/21/2016	6:00	6:00	24.00	WOR	18		P		NO ACTIVITY SDFW
8/22/2016	6:00	6:00	24.00	WOR	18		P		NO ACTIVITY SDFW
8/23/2016	6:00	7:00	1.00	PRDHEQ	28		P		CT HOLD SAFETY MTG ON SCANNING TBG OUT OF HOLE WRITE & REVIEW JSA'S
	7:00	12:00	5.00	PRDHEQ	39		P		RU TBG SCANNERS, SCAN OUT OF HOLE W/ 204 JTS YELLOW BAND, 52 JTS BLUE BAND & 25 JTS RED BAND 2-7/8" EUE L-80 TBG, LD PROD BHA, RDMO TBG SCANNERS
	12:00	15:30	3.50	WLWORK	18		P		MIRU THE PERFORATORS TEST LUBE TO 4800 PSI, RIH W/ 7" GR/JB TO 5" LINER TOP @ 9312', POOH RIH W/ 4" GR/JB & STACK OUT @ 9330' POOH RDMO W.L. (FOUND SCALE IN GR/JB) RDMO W.L.
	15:30	17:00	1.50	PRDHEQ	18		P		WAIT ON MILL & SCRAPER
	17:00	19:00	2.00	PRDHEQ	39		P		MU & RIH W/ 4-1/8" MILL, 5" SCRAPER, X OVER, 14 JTS 2-3/8" EUE WORK STRING TBG & 124 JTS 2-7/8" EUE L-80 TBG, EOT @ 4504', SECURE WELL, WELL BORE FLUID BARRIER 1, SHUT & LOCK PIPE RAMS BARRIER 2, CLOSE & NIGHT CAP CSG VALVES BARRIER 1 & 2, CLOSE & NIGHT CAP TIW VALVE BARRIER 1 & 2, SDFN
8/24/2016	6:00	7:00	1.00	WOR	28		P		CREW TRAVEL TO LOCATION HSM WRITE AND REVIEW JSA TOPIC; RIG OPERATIONS
	7:00	9:41	2.68	WOR	39		P		CSIP 0 PSI TSIP 0 PSI CONTINUE TALLY AND TIH w 82 JTS OF 2-7/8" TBG P/U 72-JTS OF 2-7/8" TBG TAG AT 9370' LINER TOP AT 9312'

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (ft)	Operation
	9:41 19:30	9.82	WOR	10		P		R/U POWER SWIVEL R/U PUMP AND LINES ESTABLISH CIRC w 215 BBLs OF 2% KCL WATER C/O TO 9477' FELL THROUGH TIH w 10-JTS TO 9791' P/U 70-JTS OF 2-7/8" TBG TO 12070' BTM AT 12008' TOH L/D 93-JTS OF 2-7/8" TBG STAND BACK 10-JTS TO 9290' SECURE WELL, WELL BORE FLUID BARRIER 1, SHUT & LOCK PIPE RAMS BARRIER 2, CLOSE & NIGHT CAP CSG VALVES BARRIER 1 & 2, CLOSE & NIGHT CAP TIW VALVE BARRIER 1 & 2, SDFN
8/25/2016	6:00 7:00	1.00	WOR	28		P		CREW TRAVEL TO LOCATION HSM WRITE AND REVIEW JSA TOPIC; RIG OPERATIONS
	7:00 11:20	4.33	MIRU	01		P		MIRU FRAC EQUIPMENT OFF LOAD ACID ATTEMPT TO TEST PUMP AND LINES FAILED RDMO ACID EQUIPMENT
	11:20 12:00	0.67	RDMO	02		N		WAIT ON NEW ACID EQUIPMENT
	12:00 17:00	5.00	MIRU	01		P		MIRU HALLIBURTON ACID EQUIPMENT REPAIR PUMP
	17:00 19:08	2.13	STG01	35		P		PUMP ACID CHEMICAL SQUEEZE TEST PUMP AND LINES TO 7570 PSI OPEN PRESSURE 0 PSI PUMP 75 GALS OF MUTUAL SOLVENT 2 BBLs OF KCL WATER 15000 GALS OF ACID HCL 15% 20 BBLs KCL WATER 55 GALS OF SCALE INHIBITOR FLUSH w 81 BBLs OF 2% KCL ISDP 1325 PSI 5 MIN 765 PSI 10 MIN 500 PSI MAX RATE 5.5 BPM AVE RATE 5.3 BPM MAX PRESSURE 2580 PSI AVE PRESSURE 1800 PSI SECURE WELL CLOSE 10 FRAC VALVE RDMO FRAC EQUIPMENT
	19:08 22:00	2.87	WOR	39		P		OPEN 7" CSG TO FLOW BACK TANK OPEN TBG TO FLOW BACK TANK WELL ON VACUUM R/D 10K VALVE TOH w 283-JTS OF 2-7/8" TBG CHANGE HANDLING TOOLS TOH w 14-JTS OF 2-3/8" TBG L/D MILL AND CSG SCRAPER SECURE WELL CLOSE AND LOCK BOPE BARRIER 1 CLOSE 7" CSG VALVE w NIGHT CAPS BARRIER 1 & 2
8/26/2016	6:00 7:00	1.00	WLWORK	28		P		CREW TRAVEL TO LOCATION HSM WRITE AND REVIEW JSA TOPIC; WIRELINE OPERATIONS
	7:00 9:00	2.00	WLWORK	26		P		MIRU WIRELINE SET 5" 15K CBP AT 9600' DUMP BAIL 15' CMT PBDT 9585' TOH L/D BAILER...MIRU TOPS FRAC EQUIPMENT
	9:00 14:24	5.40	WOR	16		P		FILL CSG w 215 BBLs OF 2% KCL WATER N/D BOPE N/U INSTALL 2 WAY AND TEST 7" MASTER VALVE 8500 PSI REMOVE 2 WAY TEST 7" CSG TO 8000 PSI AND CHART 30 MIN N/U 7" HCR 7" GOAT HEAD 7" HCR WIRELINE ADAPTER TEST AND CHART TO 9500 PSI
	14:24 17:00	2.60	WLWORK	21		P		P/U AND TEST 7" LUBRICATOR P/U 3-1/8 GUN w 22.7 GM 3JSPF 120 PHASING TIH PERFORATE STG 1 9540' TO 9349' STARTING PRESSURE 0 PSI TOH L/D GUN ENDING PRESSURE 0 PSI ALL PERFORATIONS CORRELATED TO THE CUTTERS CBL/GR/CCL LOG 04/20/15 RUN #1 SECURE WELL CLOSE ALL VALVES BARRIER 1 2 & 3 INSTALL NIGHT CAP BARRIER 4 CLOSE CSG VALVES w NIGHT CAPS BARRIER 1 & 2 SDFN
8/27/2016	6:00 7:00	1.00	STG01	28		P		CREW TRAVEL TO LOCATION HSM WRITE AND REVIEW JSA TOPIC; FRAC OPERATIONS
	7:00 11:10	4.17	STG01	35		P		STAGE 1; PRESSURE TEST LINES TO 9500 PSI. OPEN WELL. 1274 PSI BRAKE DOWN STG 1 PERFORSTION 9540' TO 9349' AT 4195 PSI, PUMPING 10 BPM TREAT w 8000 GAL 15% HCL ACID FR-76 WATER ACID FLUSH STEP DOWN RATE IN 4 STEPS SHUT DOWN FOR 15 MIN ISDP 3527 PSI 5MIN 3325 PSI 10 MIN 3221 PSI 15MIN 3171 TREATED STAGE 1... AS PER PROCEDURE FR WATER SPACER 25# CROSSLINK PAD 25# CROSSLINK 100 MESH 10# LINEAR GEL SWEEP 10# LINEAR GEL .05# W30/50 10# LINEAR GEL 1# W 30/50 20# CROSSLINK 1.5# W 30/50 20# CROSSLINK 2# W30/50 20# CROSSLINK 3# W30/50 STG FLUSH TO TOP PERF...ISDP 3853 PSI. AVG RATE 70 BPM. AVG PSI 4798 PSI. MAX PSI 5516 PSI. TTL PROP 117295# 5 MIN 3575 PSI 10 MIN 3511 PSI TURN WELL OVER TO WIRELINE

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (ft)	Operation
	11:10 13:03	1.88	STG02	21		P		STAGE 2; SET COMPOSITE FRAC PLUG AT 9306' PRESSURE ON WELL 2900 PSI PERFORATE STAGE 2 PERFORATIONS 9296' TO 9255', 10 NET FEET 30 TTL SHOTS W/ 3-1/8" 3 JSPF, 120 DEG PHASING GUNS END PRESSURE 2900 PSI ALL PERFS CORRELATED TO THE CUTTER CBL/GR/CCL LOG RUN #1 4/20/15
	13:03 14:15	1.20	STG02	35		P		ACID STAGE 2; PRESSURE TEST LINES TO 8500 PSI. OPEN WELL. 2860 PSI. BREAK DOWN STAGE 2 PERFORATIONS 9296' TO 9255' AT PSI, PUMPING 19.2 BPM. TTL OF 84 BBLS SHUT DOWN FOR 5MIN 3075 PSI 10 MIN 3030 PSI MIN 15 2965 PSI TREAT w 6000 GAL 15% HCL ACID FLUSH TO BTM PERF + 10 BBLS ISDP 3263 PSI. 5 MIN 3072 PSI. 10 MIN 3020 PSI AVG RATE 36 BPM. AVG PSI 4581 PSI. MAX PSI 7531 PSI.
	14:15 16:15	2.00	STG03	21		P		STAGE 3; SET COMPOSITE FRAC PLUG AT 9046' PRESSURE ON WELL 2900 PSI PERFORATE STAGE 3 PERFORATIONS 9031' TO 8892', 17 NET FEET 51 TTL SHOTS W/ 3-1/8" 3 JSPF, 120 DEG PHASING GUNS END PRESSURE 2900 PSI ALL PERFS CORRELATED TO THE CUTTER CBL/GR/CCL LOG RUN #1 4/20/15
	16:15 16:43	0.47	STG03	35		P		ACID STAGE 3; PRESSURE TEST LINES TO 9500 PSI. OPEN WELL 947 PSI. BREAK DOWN STAGE 3 PERFORATIONS 9031' TO 8892' AT 1942 PSI, PUMPING 8.6 BPM. TTL OF 102 BBLS SHUT DOWN ISDP 1841PSI FG .64 5MIN 1648 PSI 10 MIN 1605 PSI MIN 15 1597 PSI TREAT w 16000 GAL 15% HCL ACID FLUSH TO BTM PERF + 10 BBLS ISDP 1971 PSI. 5 MIN 1725 PSI. 10 MIN 1680 PSI AVG RATE 35 BPM. AVG PSI 2782 PSI. MAX PSI 5358 PSI. TURN OVER TO WIRELINE
	16:43 17:40	0.95	STG04	21		P		STAGE 4; SET COMPOSITE FRAC PLUG AT 8630' PRESSURE ON WELL 1700 PSI PERFORATE STAGE 4 PERFORATIONS 8607' TO 8428', 22 NET FEET 66 TTL SHOTS W/ 3-1/8" 3 JSPF, 120 DEG PHASING GUNS END PRESSURE 1100 PSI ALL PERFS CORRELATED TO THE CUTTER CBL/GR/CCL LOG RUN #1 4/20/15
	17:40 20:25	2.75	STG04	35		P		STAGE 4; PRESSURE TEST LINES TO 9532 PSI. OPEN WELL. 906 PSI BRAKE DOWN STG 4 PERFORSTION 8607' TO 8428' AT 1895 PSI, PUMPING 19 BPM TREAT w 8000 GAL 15% HCL ACID FR-76 WATER ACID FLUSH STEP DOWN RATE IN 4 STEPS SHUT DOWN FOR 15 MIN ISDP 1729 PSI FG .64 5MIN 1533 PSI 10 MIN 1460 PSI 15MIN 1322 TREATED STAGE 4... AS PER PROCEDURE FR WATER SPACER 25# CROSSLINK PAD 25# CROSSLINK 100 MESH 10# LINEAR GEL SWEEP 10# LINEAR GEL .05# W30/50 10# LINEAR GEL 1# W 30/50 20# CROSSLINK 1.5# W 30/50 20# CROSSLINK 2# W30/50 20# CROSSLINK 3# W30/50 STG FLUSH TO TOP PERF...ISDP 2080 PSI. AVG RATE 75 BPM. AVG PSI 2225 PSI. MAX PSI 2945 PSI. TTL PROP 98725# 5 MIN 1892 PSI 10 MIN 1750 PSI
	20:25 22:00	1.58	RDMO	02		P		SECURE WELL CLOSE ALL VALVES BARRIER 1 2 & 3 INSTALL NIGHT CAP BARRIER 4 CLOSE CSG VALVES Mw NIGHT CAPS BARRIER 1 & 2 R/D WIRELINE ISOLATE PUMP TRUCKS FROM WELL HEAD CLEAN TRUCKS TO FLOW BACK TANKS
	22:00 23:00	1.00	FB	10		P		TURN WELL OVER TO FLOW BACK WAIT 3 HRS AFTER FRAC OPEN WELL ON A 12/64 CHOKE
	23:00 6:00	7.00	FB	10		P		FLOW BACK WELL 225 BBLS OF WATER 0 BBLS OF OIL 0 GAS 12/64 CHOKE WELL HEAD 675 PSI
8/28/2016	6:00 6:00	24.00	FB	10		P		FLOW BACK WELL 718 BBLS OF WATER 0 BBLS OF OIL 0 GAS 14/64 CHOKE WELL HEAD 325 PSI
8/29/2016	6:00 6:00	24.00	FB	10		P		FLOW BACK WELL 465 BBLS OF WATER 220 BBLS OF OIL 0 GAS 20/64 CHOKE WELL HEAD 250 PSI
8/30/2016	6:00 7:00	1.00	WOR	28		P		CREW TRAVEL TO LOCATION HSM WRITE AND REVIEW JSA TOPIC; RIG OPERATIONS

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (ft)	Operation
	7:00 15:30	8.50	WOR	16		P		N/D TOP HCR VALVE AND GOAT HEAD KILL WELL w 130 BBLs OF 10# BRINE WATER N/D BTM HCR VALVE N/U AND TEST 5K BOPE & ANNULAR
	15:30 17:20	1.83	WOR	15		P		WELL STARTED FLOWING KILL WELL w 130 BBLs
	17:20 19:00	1.67	WOR	39		P		OPEN WELL TIH w 6" BIT AND BIT SUB w 200-JTS OF 2-7/8" TBG EOT 6535' SECURE WELL CLOSE AND LOCK BOPE BARRIER 1 CLOSE HYDRILL BARRIER 2 INSTALL TIW VALVE w NIGHT CAP BARRIER 1 & 2 CLOSE 7" CSG w 2 VALVE EACH SIDE BARRIER 1 & 2 SDFN
8/31/2016	6:00 7:00	1.00	WOR	28		P		CREW TRAVEL TO LOCATION HSM WRITE AND REVIEW JSA TOPIC; RIG OPERATIONS
	7:00 8:30	1.50	WOR	15		P		CSIP 400 PSI TSIP 300 PSI BLEED OFF WELL KILL TBG w 38 BBLs OF 10# BRINE WATER CONTINUE TIH w 70-JTS TAG 7" PLUG AT 8630'
	8:30 9:00	0.50	WOR	39		P		CONTINUE TIH w 68-JTS TAG 7" PLUG AT 8630'
	9:00 11:00	2.00	WOR	10		P		R/U POWER SWIVEL ESTABLISH CIRC START C/O SAND PUMP STARTED TO LEAK AT DISCHARGE CIRC CLEAN SHUT WELL IN
	11:00 13:00	2.00	WOR	59		N		REPAIR PUMP DISCHARGE FLANGE NIPPLE
	13:00 21:00	8.00	WOR	10		P		ESTABLISH CIRC DRILL 7" PLUG AT 8630' CIRC CLEAN HANGE BACK SWIVEL TIH w 10-JTS OF 2-7/8" TBG TAG 8985' P/U POWER SWIVEL CONTINUE DRILL PLUG PARTS TAG 2ND PLUG AT 9046' CIRC CLEAN KILL TBG w 20 BBLs OF 10# BRINE WATER TOH ABOVE PERFS w 42-JTS OF 2-7/8" TBG EOT 8302' SECURE WELL CLOSE AND LOCK BOPE BARRIER 1 CLOSE HYDRILL BARRIER 2 INSTALL TIW VALVE w NIGHT CAP BARRIER 1 & 2 CLOSE 7" CSG w 2 VALVE EACH SIDE BARRIER 1 & 2 SDFN
9/1/2016	6:00 7:00	1.00	WOR	28		P		CREW TRAVEL TO LOCATION HSM WRITE AND REVIEW JSA TOPIC; RIG OPERATIONS
	7:00 14:30	7.50	WOR	10		P		CSIP 150 PSI TSIP 0 PSI TIH 42-JTS OF 2-7/8" TBG R/U POWER SWIVEL ESTABLISH CIRC DRILL 2ND PLUG AT 9046' CHASE PLUG PARTS TO 9306' AND DRILL 3RD PLUG C/O TO LINER TOP AT 9312' CIRC CLEAN KILL TBG R/D POWER SWIVEL
	14:30 17:30	3.00	WOR	39		P		TOH W 148- JTS TO 4074' KILL WELL WITH 130 BBLs OF 10# BRINE WATER CONTINUE TOH 126-JTS OF 2-7/8" TBG L/D 6" BIT
	17:30 19:00	1.50	WOR	39		P		P/U 4-1/8" BIT AND BIT SUB TIH w 14-JTS OF 2-3/8" TBG CHANGE HANDLING TOOLS CONTINUE w 128-JTS OF 2-7/8" TBG ESO 4525' SECURE WELL CLOSE AND LOCK BOPE BARRIER 1 CLOSE HYDRILL BARRIER 2 INSTALL TIW VALVE w NIGHT CAP BARRIER 1 & 2 CLOSE 7" CSG w 2 VALVE EACH SIDE BARRIER 1 & 2 SDFN
9/2/2016	6:00 7:00	1.00	WOR	28		P		CREW TRAVEL TO LOCATION HSM WRITE AND REVIEW JSA TOPIC; RIG OPERATIONS
	7:00 9:40	2.67	WOR	39		P		CSIP 550 PSI TSIP 450 PSI KILL WELL CONTINUE TIH w 148-JTS OF 2-7/8" TBG
	9:40 15:55	6.25	WOR	10		P		R/U POWER SWIVEL ESTABLISH CIRC C/O TO PBTD 9585' CIRC WELL CLEAN R/D POWER SWIVEL
	15:55 18:00	2.08	WOR	39		P		TOH L/D 32- JTS OF 2-7/8" STAND BACK 126-JTS OF 2-7/8" TBG EOT 4560' SECURE WELL CLOSE AND LOCK BOPE BARRIER 1 CLOSE HYDRILL BARRIER 2 INSTALL TIW VALVE w NIGHT CAP BARRIER 1 & 2 CLOSE 7" CSG w 2 VALVE EACH SIDE BARRIER 1 & 2 SDFN
9/3/2016	6:00 7:00	1.00	WOR	28		P		CREW TRAVEL TO LOCATION HSM WRITE AND REVIEW JSA TOPIC; RIG OPERATIONS
	7:00 9:28	2.47	WOR	15		P		CSIP 600 PSI TSIP 400 PSI KILL WELL CIRC OOUT OIL AND GAS w 160 BBLs OF 2% KCL PUMP 160 BBLs OF 10# BRINE WATER
	9:28 10:30	1.03	WOR	39		P		TOH w 126-JTS OF 2-7/8" TBG L/D 4-1/8" MILL AND BIT SUB

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (ft)	Operation
	10:30 12:03	1.55	WOR	39		P		P/U AND TIH w 5-3/4" NO-GO SOLID 2-JTS OF 2-7/8" TBG 5-1/2" PBGA 4' X 2-7/8" TBG SUB MECH PSN 2-7/8" X 2-1/4" X 40' PUMP BARREL 4-JTS OF 2-7/8" TBG 7" TAC 248-JTS OF 2-7/8" TBG
	12:03 15:12	3.15	WOR	16		P		KILL WELL w 160 BBLS OF 10# BRINE WATER INSTALL 2' X 2-7/8" TBG SUB AND 4' PERFORATED SUB SET 7" TAC AT 8111 MECH PSN 8287' EOT 8392' LAND TBG ON HANGER w BPV N/D HYDRILL N/D BOPE N/D 7" MASTER VALVE PU TO PULL TBG SUB WELL FLOWING
	15:12 16:30	1.30	WOR	16		P		N/U BOPE N/U HYDRILL TEST TO 2000 PSI GOOD INSTALL TIW VALVE w NIGHT CAP BARRIER 1 & 2 LANDED ON HANGER BARRIER 1 CLOSE BOPE AND LOCK BARRIER 2 CLOSE HYDRILL BARRIER 3
	16:30 6:00	13.50	FB	17		P		OPEN WELL ON A 36/64 CHOCK TURN WELL OVER TO FLOW BACK WELL WOULD NOT FLOW THROUGH PERFORATED SUB MONITOR WELL
9/4/2016	6:00 6:00	24.00	FB	17		P		WELL TRYING TO FLOW MONITOR WELL
9/5/2016	6:00 6:00	24.00	FB	17		P		MADE LITTLE TO NO FLUID
9/6/2016	6:00 6:00	24.00	FB	17		P		MADE NO FLUID
9/7/2016	6:00 7:00	1.00	WOR	28		P		CREW TRAVEL TO LOCATION HSM WRITE AND REVIEW JSA TOPIC; RIG OPERATIONS
	7:00 10:30	3.50	WOR	16		P		R/U LINE OFF WELL TO CELLER WELL FLOWING THROUGH PERFORATED SUB PUMP 100 BBLS OF 10# BRINE WATER DOWN WELL VERIFY PRESSURE ON CSG WELL DEAD N/D HYDRILL N/D BOPE REMOVE PERFORATED SUB LAND TBG w 25K TENSTION N/U WELL HEAD INSTALL CAP STRING
	10:30 12:00	1.50	WOR	15		P		CHANGE HANDLING TOOLS FLUSH TBG w ROD CHEMICALS ATTEMPT TO DROP STANDING VALVE TBG PRESSURE 500 PSI KILL TBG w 50 BBLS OF BRINE WATER DROP STANDING VALVE AND CHASE w 48 BBLS PF 10# BRINE WATER
	12:00 15:30	3.50	WOR	39		P		P/U 2-1/4" PLUNGER 1-1/2" POLISH ROD TIH w 15-1-1/2" CBARS 98-3/4" RODS 104-7/8" P/U 18-NEW 7/8" TIH w 25-1" RODS TOH L/D 32-1" RODS 94-1" RODS SPACE OUT PUMP w 2',4',6', X 1" PONY RODS FILL TBG w 0 BBLS OF 2% KCL WATER TEST AND STROKE TEST TO 1000 PSI GOOD
	15:30 18:30	3.00	RDMO	02		P		RDMO SLIDE ROTOFLEX CHECK FOR TAG NO TAG CLEAN LOCATION TURN WELL OVER TO PRODUCTION